### **MAXIMUM ICE**

## Kay Kenyon

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For Nathan, Paul, and Isaac Overcast

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### **PROLOGUE**

It was a cold homecoming. By some accounts, no homecoming at all. After 250 years, *Star Road's* crew were prepared to be strangers to earth, but not like this.

Captain Anatolly Razo sat well away from the porthole, his face averted from the view. He kept a watch instead on the physio chamber, where Zoya was at last beginning to wake up. The view of Ship Mother was much preferable to the other. Her eyelids trembled, as the realm of stasis held her for a few more moments. When you'd been asleep for fifty-four years, waking up was no simple matter.

The lid of the chamber had been removed, and the med offi-cer had been running revitalization lines for several hours. Ship Mother Zoya Kundara lay on her right side, her dark hair now carefully brushed away from her face. The diamonds in her left ear glinted like a control panel.

The captain withdrew his hand from Zoya's shoulder, resist-ing the urge to nudge her as if from a night's sleep. He was both eager for her to wake and dreading it. As captain, it was his task to tell her the news. He thought of opening lines, all of them bad.

At seventy-eight, Anatolly Razo had never struggled to ex-press himself—except in Zoya Kundara's presence.

"Dim the lights," he told his assistant. Zoya was sensitive to light on awakening.

The med officer gave some advice: "Music helps."

Nothing helps, the captain thought, but nodded an assent.

Violin music flooded the room. It was a traditional piece, the music of the Rom, his gypsy people. The soaring melody moved him to take Zoya's hand. It was still cool. He rubbed her hand between his own, gazing at her still-youthful face, her dark beauty. She was thirty-six years old, with high cheek-bones, an aquiline nose, and a glorious figure. His heart crimped a little, looking at her. But all that was long past. Half a century past.

During those decades *Star Road* had pursued its homeward journey, much of it under his captaincy. They were eager to come home. They *must* come home. On a vessel that had begun its journey with 7000 men, women, and children, 1146 crew mem-bers remained. To be sure, it was a gradual decline, measured by the death rate of a robust people—robust in all ways but one.

Zoya stirred, mumbling something. She waved at the tubes around her, as though parting cobwebs. Her eyes opened. Deep brown—trailing dreams, the captain thought. She looked around the cabin, registering reality.

Her voice was a scrape. "How long?"

"Fifty-four years," the captain answered, making his voice gentle. It was an awful pronouncement, but it was the truth. He never understood how she could bear it—this waking and long sleep and waking again. It took a toll on her body, and no doubt, on her soul. But gypsy women were tough. After all, they had to live with gypsy men.

She focused on him. "Anatolly," she murmured, "you look awful."

He shrugged. "I'm an old man."

Her mouth attempted a smile. "No excuse." She glanced at Kristof, the med officer hovering nearby. "Drink," she said.

Kristof brought her a thimble-sized portion of water as Ana-tolly helped her to sit up.

Zoya eyed the water, then brought out a more convincing smile. "Surely a little wine, instead?"

Anatolly intervened. "Water first, Zoya. Easy does it."

She uttered a rusty laugh. "Oh, Tolly, nothing is ever easy. Especially without wine." Her hand went to her ear, to touch the four diamond studs, counting them, as was her habit on awakening. They winked in the dim lights of the physio unit.

Stretching out an arm, she wiggled each finger in turn. She seemed to have forgotten about the wine. "So, Anatolly," she said, her voice slurred, "why so glum?" She licked her teeth, trying to clean the coating from them. Zoya claimed that fur grew on her teeth during these sleeps. An assistant appeared with brush and paste.

His courage fled. "It can wait, Zoya. Bad news can always wait. You should gather your strength." He added feebly, "Brush your teeth."

The assistant helped Ship Mother to do so. Then Zoya looked from the captain to the doctor to his assistant. She put on her patiently waiting face, that catlike smile. "My teeth are cleaned, Anatolly. Now tell me."

He cleared his throat. "Well, Zoyechka, it's earth, you see... we've arrived. But with the situation... we decided... that is, once we... discussed everything..."

"Yes, Anatolly. Go on, I'm listening."

Caught in her brown gaze, he blurted. "Ship Mother, we have a problem."

Now her laughter came freely, the rich, deep laugh he re-membered from their time together during her last awakening. "Yes, a problem," she said. "Of course." But she could have guessed that much. They always woke Ship Mother in times of trouble. She was their counselor, wasn't she?

He looked to the doctor. Kristof was no help at all, suddenly busy with tubes and instruments.

In a stronger voice, she said, "Get me out of this thing."

They helped her to sit on the edge of the pallet, trailing wires and monitors, her slippered feet barely touching the deck.

"Unhook me, Kristof."

Kristof looked surprised that she called him by name, but it was written over his breast pocket. He was in no hurry, though, to remove her life support.

"You look like your father," she said, flashing a brilliant smile. "But even more like Emil, your father's father. A good man, your grandfather. Come to see me when we've got rid of these tubes, and I will tell you a good story about him."

As Kristof removed the lines connecting Zoya to her physio unit, the doctor looked at her with that expression Anatolly had seen before, the one tinged with hero worship. He sighed. It was the old Zoya.

Sitting up, she murmured to Anatolly, "Is it bad, then?"

"It's... bad. Yes."

She nodded. "So then, Anatolly, the worst is over. You've managed to tell me we have a bad problem. That was well done." Her eyes held him. "Now tell me the rest."

He knew, then, that talking was the wrong approach. She must see for herself. "Come, Zoya," he said, "and tell me what you see."

Slowly they walked together toward the porthole, he sup-porting her on one side, Kristof on the other.

"Earth..." she said, as they walked. "It's still there?"

"Yes, Zoya."

Before she looked out the porthole she turned to Anatolly. "You're going to show me why we haven't heard from them."

For most of their 250-year voyage, no radio messages from earth.

Anatolly nodded. He wanted to comfort her, to protect her.

Simultaneously, he wanted her to comfort and protect *him*, as she had always done, for all her ship children. He watched her as she turned to look out. It pained him to see her look of vul-nerability, the same look he'd seen in every crew members face as they'd gazed on ancestral earth.

Below, light glinted off a pearl white globe, a world so pale and barren it could not be earth—yet it was. Gone were the fa-miliar continents and oceans. In their place, a new landform clutched the planet, squeezing the oceans into an equatorial remnant. Thin clouds hovered in the equatorial region like a ghostly ring, further confusing the observer as to which planet, exactly, this was. Jutting through the white mantle, great mountain chains could be seen, now merely islands in a hard-ened sea.

It cooled the heart, to think that this was earth. Barren was the best word for it, barren like so many worlds they'd seen. They'd thought earth would always abide. But it hadn't, not at all...

They stood thus for several minutes, gazing at the ruin of earth.

She struggled for control. Of all the inhabitants of *Star Road*, only Zoya was of earth. She could remember how it had once been.

Trying to reassure her, Anatolly said, "We're picking up weak radio signals. There are people—we don't know their lan-guage. A breathable atmosphere, remarkably. It's not a dead world... not entirely."

Finally, she managed to say, "What happened?"

"We don't know."

"Is it an ice age?"

"No. It's... not water. Not ice. We don't know what it is."

"But it's home," she whispered.

Anatolly allowed his despair to seep out. "Is it?"

" 'Home is the place where, when you have to go there, they have to take you in." Zoya knew her poetry, and she some-times used it to her advantage.

"But they don't have to, Zoyechka. We've been gone ten thousand years, in their time, as they measure it." He didn't presume upon a warm welcome from earth. The People of the Road had never had a glad welcome from earth's people. So they would make no assumptions about being *taken in*—especially given their state of ignorance about this new earth. Not even the orbiting satellites could enlighten them. They had captured a half dozen of them and downloaded their data. Only there wasn't any. The satellite data-storage units con-tained only noise.

The science team hadn't slept since Ship arrived in orbit. Spectography, electron diffraction, all their analytical tools probed and pried at answers. There were a few discoveries. A huge and fluctuating electromagnetic signature came from the surface. Average temperatures were cool, but not cold. The chemical composition of the new landforms was famil-iar—yet anomalous. To learn more, they must go down to the surface.

Zoya was so quiet, just staring. Her thoughts were likely what his own had been when he first saw the altered earth: What calamity had befallen their home world? What remained of life and land?

There was a stirring behind them. People had started to trickle into the room from the corridor. Anatolly could see a crowd assembled there.

Zoya took a very deep breath, as though testing her lungs for what they could hold, then exhaled. She composed her ex-pression and turned from the porthole. He marveled at her composure, her courage. No, that wasn't it. It was her faith—that they would go on. He saw it in her eyes, the lift of her chin. The others saw it too, and crowded into the room to be near her.

Anatolly had ordered everyone to stay away, to give Ship Mother a decent interval to wake up. But ordering the Rom, of course, was often a hopeless enterprise. Here was Sava Uril, pushing forward, grasping Zoya's hand. And Rebeka Havislov, Jozsef Mirran, Sandor Laslo, Anna Mijanovitch, Viktor Novic, and others, gathering around her.

She gazed at them, looking at each person in turn. What-ever generational features she recognized, it must have wanned her heart, for she smiled, a broad smile of pleasure.

One of the men came forward with a single red rose, in the traditional greeting that normally would have come from a child. Her hand shook as she accepted it. By her glance around the room\* she had just noticed there were no youngsters pres-ent. She caught Anatolly's eye—but that story could wait.

"My children," she said, as she always did, referring to old and young alike.

It made Anatolly glad to hear her say those words, her voice steady and deep.

She looked toward the portal, then back at them. "Yes, I've seen it." She nodded. "Things change. Every time I waken, things have changed. Who knows that better than our people? You are still my beloved children. And that"—she nodded at the window—"is still home." She drew herself tall. "Or it will be, when the Rom make their footprints in the snow."

Rebeka Havislov dabbed at her eyes with a kerchief. But she was smiling.

Anatolly sighed. The women were crying and making plans. Perhaps things would be all right, after all.

Then the crowd was surging forward to embrace Ship Mother and shake her hand.

Amid the press of well-wishers, Zoya's voice came unmis-takably: "Bring me my boots."

As someone ran to do so, she called after him, "And some wine."

#### **PART I:**

A Fearful Symmetry

**CHAPTER ONE** 



Zoya lay on her bunk in the shuttle cabin, listening for sounds of earth. But there was nothing, not even wind. The earth was a silent place, at least here, in this wide valley.

The shuttle had set down in northwest Canada, between the continent and Vancouver Island. The names meant nothing now, especially the political names. Among the few relevant geo-graphical names were the mountains. As they had descended yesterday, they had glimpsed the range of the Olympics jutting up through the planets new firmament.

Their landing site had once been the Strait of Georgia. Now it was a broad, flat valley between low hills of crystalline land-forms. The shuttle crew was calling it crystal. After they had landed, people crowded around the view screens, seeing the facets, the gem-shapes protruding from the ground like dis-torted images of the vanished trees. There had been a profound silence as the crew stared out. The sun was setting, putting a glare on the landscape—a little disturbing and overbright, like a good song turned up too loud.

Zoya sat up. By her wrist lex, it was almost dawn at this lati-tude and in this season, late autumn.

She touched the diamond studs in her ear. Their solidity re-assured her that she was awake, in the real world. Ah, but what was real? The suspended land of quasi-sleep, or the consensual realm of waking? Both lands had their claim on her. Sleep could brag of the centuries—but waking always got her imme-diate attention. There was coffee, for one thing. Good gossip. Winning at cards. Actually, it was a long list, and she recited it every time she awoke—the reasons why life was good, even amid disasters.

Throwing off the covers, she called for lights and aban-doned her bunk. Sleep was hopeless, and a sunrise beckoned. Now she would see all the sunrises, in sequence. The role of Ship Mother could fade, since her people were finished with the long star road. Ship Mother had been the tether to home, conceived as a tradition to preserve tradition.

But, truly, she was ready to stop parceling out her days.

In moments she had dressed and was heading down the corridor. Her impulse was to get moving, do something, talk to people—go outside. Only the science crew had been outside so far. You can go out in the morning, Lieutenant Bertak had told her. Easy enough for him to put it off, he hadn't been waiting 250 years.

She almost collided with Fyodor Mirga, just emerging from the science station.

He was dressed for the cold.

"Going outside, then, Fyodor?" she asked, thinking she might slip out with him.

Fyodor looked eager. "I couldn't sleep. Might as well get an early start." He was supervising the boring in the research tent outside, where a drill had been working through the night to provide a sample core. "The drill is jammed," he added.

"Need some help?"

"Sorry, Ship Mother. Lieutenant Bertak says..."

He didn't like to turn her down; only Lieutenant Bertak en-joyed *that*. They had not hit it off well, she and the first mate.

Fumbling in his pocket, Fyodor brought out a translucent rock, a piece of crystal formed into a tiny, perfect obelisk. He-pressed it into her hand. "A piece of the earth," he said.

She felt her throat swelling shut. Before she could embarrass herself with tears, Fyodor turned down the corridor, waving good-bye, as two crewmen joined him. They were fully armed, and looked sour to be awakened so early.

Zoya turned the crystal over in her hand. Fyodor didn't hes-itate to call it *a piece of the earth*. There was something sweet and bold about the statement. Looked at strictly scientifically, the average atomic composition of the substance was silicon, oxygen, aluminum, iron, calcium, and other elements, in the precise ratio of the old earths crust. But the crystalline material was no known mineral. This notion frightened most of the crew; but Fyodor had the look of a boy in a bicycle shop.

Once in the shuttle galley, she activated a cup of coffee and keyed up the view screen. The shuttle's outside lights showed the near vicinity: the research tent, and surrounding it, a flat basin strewn with erratic, faceted slabs, like jumbled ice flows. Wind blew eddies of clear sand, glittering in the floodlights. It drifted into piles. However long earth had worn its coat, it had been long enough to erode slightly, producing small grains of crystal.

The view didn't crush down on her as it did the crew. Never an ardent Catholic, Zoya still saw wisdom in the injunction against despair. To her, this was a fresh start, a place swept clean of old dangers and ancient sins.

Somehow, the land was inhabited. From her work so far on the content of radio transmissions, the local language was re-lated to English. With her linguist's ear, she was already picking out phonological similarities to *Star Road's* dialect. The lexical and syntactic changes from Ship's English were not as pro-found as she would have guessed from the long time period involved. Given the harsh global conditions and difficulty of travel, there may have been few outside influences to propel changes in syntactical rules and vocabulary.

Additionally, from hundreds of points around the globe came transmissions, in many other languages. So people had survived. It was well to remember these miracles amid all their sorrows.

For the ship had returned without children. *Star Road's* crew were as fruitless as the crystalline fields outside. The youngest of her people was nineteen.

Earth was—or so they had presumed—the haven where they would renew themselves, the warm and green cradle of life. There might well be other such worlds, but *Star Road* hadn't found them. And now the ship was out of time. This might be the last generation of *Star Road*, with its women un-able to bear children to term, the consequence of 250 years of interstellar radiation that not even the vaunted microceramic shielding of the great vessel could successfully halt.

She was startled at a movement in the corridor.

Janos Bertak, the ship's first mate, stood in the doorway. "What are you doing?"

"Looking outside."

"We heard noises in here."

She laughed. "Well, Janos, it was only me. I hope I'm not breaking curfew."

Her attempt at lightheartedness was met with a grimace.

Janos Bertak had a full mustache that failed to make up for a seriously receding hairline. When he frowned it involved his whole forehead and bald pate.

He was a nervous man. For one thing, they had brought the small shuttle down with only fourteen crew. Anatolly had judged that the number one shuttle, with its prodigious arma-ment, would send the wrong message to the local inhabitants, so he sent the small one. Another of the first mate's worries was his wife. Janos Bertak was middle-aged and Tereza was young. She was a great beauty, with classic features, and that creamy skin and red hair that graced generations of women and men in her family. Zoya remembered Tereza's great-great-grandfather Halvor—now *there* was a man who knew how to please a woman.

Janos turned to leave, but she stopped him. "Fyodor went outside," she said. "Could I join him, just to watch?",

"I have enough to worry about without you going outside."

She couldn't suppress a smile. "Janos. *Nothing* would stop you from worrying." It was the wrong thing to say. He left the galley without comment, moving on to the next worry.

Zoya took out the piece of crystal and rubbed her finger along its smooth side. Leaning into the comm node, she hailed Fyodor, whose shadow she could see moving in the bright tent. "By the way, Fyodor, thank you for the gift."

She placed the crystal on the table in front of her. In the semidark galley, it lay torpid, bleached of color.

"Fyodor?" She shouldn't disturb his work. But since she al-ready had, he should answer. "Fyodor?"

No response. Again she punched in the code for the remote unit, hailing him.

On-screen, the predawn had turned the world ghostly gray. The tent, vivid yellow, sat in a puddle of light like melted but-ter. Fyodor was moving inside the tent. There were two people in the tent. The other guard would be outside. Still...

She punched in the cockpit. "Margit?"

When the copilot answered, Zoya said, "This is Zoya. Just checking, but from this node I can't hail the research tent."

"Stand by." A click, and Zoya was on hold. She rose, gazing at the view screen. Now there was only one person in the tent, hunkered over. The drill was giving Fyodor a bad time.

More clicks. Margit would take the comm problem seri-ously. From a long space tradition, any mechanical problem, no matter how small, got immediate attention.

Zoya heard a noise down the corridor. Someone running.

She strode to the door, seeing Janos hurrying down the cor-ridor toward the cockpit. In the next instant, a braying alarm kicked in, bringing crew into the corridor, some armed, all rushing to stations.

A movement on-screen caught her attention. Swirling to face the view screen, Zoya saw someone standing outside. It wasn't Fyodor. Whoever it was, he—she thought it a he—was covered in blood. Crimson rags hung from him like torn flesh. And he was screaming. She could hear nothing, but the strain

in the neck and gape of the mouth spoke loudly enough. The figure stood directly facing the shuttle, arms slightly raised, his face contorted in a monstrous howl that seemed to be aimed directly at her.

A spray of sand obscured the viewing lens for an instant. When it cleared, the figure was gone.

Keeping close to the wall so as to be out of the way of hurry-ing crew, Zoya made her way to the cockpit. She no more than put her head inside the door when Janos snapped, "Stay out of the way."

"I saw someone out there, a stranger..."

Janos was bent over the controls, punching in the feed from additional external cameras. "We all saw him. What do you think the alarm was about?" At the control panel, four views of the tent from ship's cameras showed a silent scene: tent swollen with light, gray snow turning pink in the sunrise—but all silent, unmoving. No sign of the man in rags. Behind her, sev-eral crew had formed up, all guns and boots and wild eyes.

Janos barked at the pilot, "Tomos, hail the captain, and keep a wide surveillance, this could be just the first wave." He turned to the armed unit. "You, you, and you, take the main hatchway, the rest go out the emergency hatch." The surveil-lance systems showed nothing, but Janos was taking no chances.

The forward hatch opened just long enough for five crew to dart out, then clanged shut, leaving behind a patch of cold air. The second unit rushed aft. Amid the flurry of deploy-ment, Zoya retreated to the galley, where she opened the comm node to hear what was transpiring in the cockpit. The view screen showed crew moving up on the tent—no sign of the man in rags.

Then, as the sun crested the hills, Zoya could just make out a figure approaching, but still some one hundred meters away. Someone was gliding over the ground toward the ship—mov-ing fast enough that he might be flying or skating. Meanwhile, the crew were spreading out, surrounding the tent.

On comm, she heard Margit say, "Someone approaching from the west, sir."

"Lay down perimeter fire," Janos said.

"Yes, sir."

"No," Zoya hissed into the comm node.

Ship's guns clattered, barely muffled by the hull.

Leaning into the node, she said, "Janos, it's just one person." But no one was listening. She tore into the corridor and ran to the outside hatch, guarded by a wan youngster who looked to be all of twenty years old.

"Open it," she barked. He started to protest, but in the end he was no match for her. Then she was on the access ramp, running into a stew of dust and screams. Piquant air rushed to her nostrils, and the sky loomed above her in monstrous bless-ing. The fray had kicked up a flurry of dust that the morning sun infused with blind light.

As the dust settled over the scene, Zoya saw that the new arrival was standing on a sled, and was raising a huge weapon that looked like a harpoon gun, aiming it at the tent.

Crew members were turning in every direction, watching for attack. Several fired at the man in the sled, but they had to face into the blinding dawn, and missed.

In the next instant, the tent collapsed, leaving one person standing inside, a swaying human tent post. The newcomer fired his gun and sent a spear full into the body of the tent-draped figure. Then he lowered his weapon and stared at what he had done.

"No one shoot," Zoya shouted as she ran up to the sled. The crew hesitated for a moment, with Ship Mother in the line of fire. But the stranger had lowered his weapon; he was giving up—or he had accomplished what he set out to do.

Nevertheless, several crew moved in and dragged the sled man from his perch, wrestling him to the ground and seizing his harpoon. Other crew were still keeping watch, squinting at the territory, watching for movement. But far into the distance, there was nothing but flat, white desert.

Now Janos was approaching from the shuttle, all outrage.

She thought he might grab her forcibly. She used her most calming voice: "Let us talk first. You can always shoot him later."

From the look on Janos's face, it was Zoya he'd like to shoot. "Get inside, Ship Mother. Now." He turned his attention to the collapsed tent, striding over to the wreckage.

Two crew members were trying to pull the tent away from the impaled man, but the spear effectively pinned it in place. They managed the task far enough to see that the victim was none of theirs. It was the rag man, lying immobile. As they pushed back the loose tent fabric, they uncovered a dreadful scene. Three other bodies lay in blood-drenched sand. Crew members were crouched down, taking their vital signs.

Oh my children, Zoya thought. Oh, Fyodor.

The sled man, held firmly between two of the biggest crew-men, said something to her that she couldn't catch. She looked at him closely for the first time, seeing a burly, bearded man, dressed in furs. He jutted his chin at the tent.

In a fury, Janos advanced on him and struck him a blow across the face.

Zoya inserted herself between Janos and the sled man. "He's alone, for God's sakes," she spat at him.

Janos turned to her, taking hold of her arm. "Stay out of this." His words came out like bullets. Janos pointed at crew-man Loski. "Take Ship Mother inside."

Loski took her gently by the elbow. But when Janos walked over to the fallen tent, Zoya followed him, staring down her es-cort, who was clearly uncertain about manhandling Ship Mother.

Zoya saw one of the crew turn away from the scene, gag-ging-

Fyodor lay on the ground, his throat torn out, with strips of skin pulled back from his chest. It looked as though he had been flailed. She had seen worse in her crisis-strewn life, but not by much.

Kneeling beside the fallen crew members, one of the men reported to Janos: "All dead, sir." He looked up at the first mate as though Janos could change this, could order it to be differ-ent. Zoya knew that look, and was thankful it wasn't, this time, aimed at *her*.

She crouched down next to Fyodor, closing his eyes with her hand. Next to Fyodor lay the man in bloody rags. He had long black hair, no beard. And he was thin; bones of a once-large frame almost poked through his skin. Dripping from his mouth, shreds of bloody tissue.

"Mother of God," someone whispered. Around her, the crew were just realizing that the man had been eating Fyodor's flesh.

"Cover him," Zoya said, nodding at Fyodor's body. She placed her hand on the arm of the young crewman to steady him.

She turned back to the crew holding the sled man by the arms. "You really should let him go. He killed our attacker."

As though he knew he was being discussed, he made eye contact with her. "Widgen," he said. He nodded at the impaled body. "Malid widgen."

Bad... something, Zoya guessed. Yes, very bad.

Amid the carnage, one of the crew said, "The man was starv-ing to death."

Someone answered, "What starving man has the strength to do thisT

Janos put an abrupt end to the macabre speculations, order-ing them to bring the bodies on board, all but the murderer.

Zoya turned to Janos. "I think the man with the harpoon did us a favor. It came too late, but he wasn't threatening us."

Janos murmured at her, "We'll get his story—if you'd be so kind as to translate, instead of playing soldier."

"Yes, Lieutenant." She had no will to snipe back at him, here, with three of her people lying dead.

Janos nodded at the crew, and they released the man. The sled man's face was impassive, but turned dark when he glanced at the man holding his harpoon. Then he looked over at Zoya as though he blamed her for his loss.

She allowed a crewman to lead her up the ramp. Turning back at the hatchway, she met Janos Bertak's cold gaze. There was no mistaking it, she had just made an enemy.

But it was for a good cause. Janos couldn't be trusted in command. In the crisis, his impulse was to fire before aiming—before thinking. Anatolly had wished to present a peaceable face to the world, and it was a good inclination. One that Janos Bertak didn't share.

As she turned to enter the shuttle, a glint of light caught her eye.

A few hundred feet away, Zoya saw, through the windblown shards of crystal, a violet pulse of light rise to the surface and disappear again like a drowned shooting star.



Captain Anatolly Razo walked down Ship corridor at the head of a gaggle of officers and techs, all talking at once. Cluck, cluck, cluck like geese.

Did he wish to call a general meeting? Did he wish to meet with the families of the murdered crew? Would he answer a ra-dio call from Janos Bertak? Should the shuttle crew go into quarantine upon their return? And what about Tereza Bertak? The first mate's wife was in hospital. Suicide or accident, Ship's priest wanted to know.

That last was one he could answer. He turned in mid-stride to Sandor, his assistant. "Tereza is not dead; therefore, she is not a suicide."

"No, sir," Sandor replied, "but..."

Lieutenant Andropolous elbowed Sandor a bit to one side. "Janos Bertak is on the comm sir, waiting." As a group they turned down a connecting corridor, where knots of crew mem-bers were gathered in fretful clusters.

"He doesn't know about Tereza?" Anatolly asked.

"No, sir."

That was well. Janos had his hands full, planetside. And Tereza would recover. No point burdening his first mate fur-ther just then, with his wife's latest act of despair. Or, some would say, stupidity.

With all the disasters, there was no time for sleep. He'd been awake since the middle of his sleep shift, when the shuttle crew were murdered. Then Tereza, with spectacularly bad timing, tried to kill herself. Finally, over breakfast, came the report from the geophysical survey.

The survey chief who gave him the briefing looked like he'd rather be someplace else. He stated the basic bad news first, and built up to the main calamity.

Global temperatures were, on average, thirteen degrees cooler than baseline normal. This was considerably warmer than they would have predicted, given the cooling, high albedo, effect of the encroaching mantle, reflective as it was. The ocean could account for some moderating influence the survey chief added.

Great drifts of algae boosted the atmospheric oxygen supply. As to crystal-free ground, there remained a vast swath of cen-tral Africa—the former Sahel—and a smattering of Microne-sian islands. The Americas, North, Central, and South, were covered. The nonequatorial oceans, enveloped.

So far, the free land appeared barren of all plant life, al-though the Sahel was historically desert. But no matter how profound the climatological changes, there should be *some* plant species exploiting the last lands. The science team was theorizing about calamitous solar flares, but even they admit-ted it was speculation. Because of the absence of higher plants, they did not expect to find many species of animals, if any. Of course, there was the matter of the sled-driver's fur jacket... That people themselves survived at all could only be due to technology, perhaps technology similar to that which *Star Road* itself used.

But alive or dead, the land that remained was precious. Somehow they should be able to coax it to life. Didn't the ship have the frozen seeds and embryos of earth's creatures for just such a landfall? Hadn't they sacrificed much of Ship's radiation shielding to keep those embryos viable? Now they might well have to plant those seeds, in the least expected place: earth itself.

Anatolly had listened to the briefing, eating his toast, trying to fuel himself for the demands of the day. He knew there was worse news coming. Why else had the survey chief come per-sonally?

The problem was the African Sahel. There, in the one re-maining landmass large enough to support their projected fu-ture needs, the crystal stratum was growing, spreading. It was, in fact, spreading over the oceans, too, but it grew fastest on land. And in the Sahel, it was unfortunately growing very fast. Five to six meters a day, along an extensive front, both from the north and south. That settled one of their most pressing ques-tions.

Settled it for the worst: The stratum was still growing.

At that rate the Sahel would be lost within a few years, the captain concluded.

The survey chief shook his head. No, it was profoundly worse than that. The rate of growth was accelerating. Inunda-tion of the Sahel was months away, not years. How many, Anatolly asked, taking refuge in numbers. Trying to take refuge.

Three months, came the answer. After a long silence, Anatolly asked, "Why? Why is it accelerating?"

He received no answer.

After a very long time he pushed his poached eggs away, cold and congealed.

Now, as Anatolly and his advisors proceeded toward the hospital, crew turned from their conversations to shout ques-tions.

How, they wished to know, could we be sure the shuttle was out of danger?

How had the crew died, exactly? Why wasn't there more firepower to support them? Should they retaliate?

He raised his hands. "Soon, soon."

Someone screamed. "My boy, Anatolly; my boy!"

Sandor leaned in: "Anna, Konrad's mother."

"God's breath, I know that's Konrad's mother!" the captain whispered. "She's my fourth cousin, isn't she?"

"Yes, sir."

Anatolly went over to Anna and held her as she cried in his arms.

"My boy," she sobbed.

It was more than a personal tragedy. Konrad had been only nineteen years old. The last generation, and each of them so precious. Anatolly remembered Anna pregnant, her round belly going before her, the envy of every woman on *Star Road*. So proud, so joyous. And then delivered of a healthy baby boy... Anatolly had been first mate then, second to Captain Vitrovic. Those had been happier times. Families got made, ba-bies were born, at least some... The faces of the women were strong with the life power, the men content. He had been con-tent too, working behind the scenes, mustering crew loyalty, smoothing out Vitrovic's orders, jollying everyone along. Lead-ership among the Rom was a high-wire act of cajoling, inspir-ing, and bluffing. Amidst all this, personal style and masculine elan bestowed subtle but powerful authority. Throw in a crisis or two, and a captain might find himself dancing in midair.

Friends led the bereaved woman away, and Anatolly was surrounded by the clucking geese again.

"Ship Mother asks to speak to you, sir."

He glared at Sandor and continued his march to hospital. He would, by God, look in on Tereza, attempted suicide or not. A failure to visit a sick crew member was just the sort of thing people would remember and hold against him—especially someone like Tereza Bertak, who was fiercely popular among the women for reasons that mystified him. That she was liked by the men as well was easier to understand, but rankled Janos.

Sandor persisted, "Ship Mother wants..."

"Yes," the captain interrupted, "I'm sure she does."

They had planned their shuttle landing near a concentration of radio transmissions for the express purpose of dealing with the—natives—and now, they had met two, with disastrous re-sults. Janos had overreacted, using too much force; though it was true one of the natives was... demented. The story of cannibalism spread instantly through Ship, further demoraliz-ing an already traumatized crew.

Now it was a face-off between Zoya and Janos. Each wished to be the one to travel to the nearest settlement. Janos was the obvious candidate. He was strong, with experience in com-mand and negotiation. But Anatolly hesitated. He listened to Zoya. And Zoya said Janos must not go.

A voice intruded: "The general meeting of the crew, Cap-tain?" Lieutenant Andropolous was relentless.

"No, no, and no," Anatolly said. That shut him up, but the lieutenant acted hurt.

Anatolly must decide, and soon, whether for Zoya or for Janos. This fellow the shuttle had encountered, the fellow on the sled who called himself Wolf: He'd been willing to talk eventually, and now they knew 100 percent more than before. *But a 100 percent oj nothing is still nothing*.

Zoya's language program had made a breakthrough, but it still took nine hours of groping before the story came together, of the so-called Ice Nuns and the underground cities, the *pre-serves*. As to the Ice Nuns, it was reassuring that a religious community endured—if the term denoted holy orders. On this most Catholic of ships, it came as welcome news.

Wolf had asserted that if they wished to speak to those with authority, that would be the Ice Nuns. And they were far away except for a few who would be present at the preserve where he was headed with the body of the snow witch that had at-tacked the crew. As to this marauder, apparently cannibalism was common among certain outlaws—a shocking, but perhaps understandable, accommodation of ostracized individuals to the wilderness of earth. Of course, the logic of it did nothing to calm peoples alarm over this event.

Wolf was eager to be off, and would carry a passenger. He had haggled over what he would take in payment, at first de-manding pieces of the shuttle hull—the damn fool—and fi-nally settling for a good jacket and two pairs of size thirteen boots. And while they bickered with him over price, Zoya and Janos squared off against each other over who would go, Zoya arguing for her linguistics, Janos for his leadership.

Anatolly tugged at his jacket to straighten it before entering hospital.

Mercifully, the flock of officers and hangers-on stayed out-side, all but Sandor, his personal adjutant, without whom the captain could apparently do nothing.

Tereza lay on the bunk, her red hair gloriously disarrayed, her face pinched. When she saw Anatolly, she began wailing.

He turned to Kristof. "I thought you medicated her."

"She is medicated."

"Tereza," Anatolly began, "Tereza my dear..."

"You mewling ape, you pig greaser, you..."

Kristof tried to quiet her, hovering with hands outstretched, as though trying to shove the words back into her.

"And *you*." She propped herself up on one elbow, glaring at the doctor, sucking in a breath, but before she could summon her bile, Kristof pressed an ampoule into her arm and she swooned, managing just "backside of a loose-boweled cow..."

"Tereza," Anatolly began again.

"I want to die," she whispered, pawing at the front of his jacket.

Last year, Tereza had miscarried, and her depression still lingered. The barren earth had pushed her over the edge.

"Tereza, you're young, you have everything to..."

"You clown! I have nothing, nothing to live for." When she was angry like this, at least she wasn't crying. He restrained himself from patting her hand.

When he didn't react, she raised her voice for the benefit of the few other patients on the ward. "We're all going to die! The earth is nothing but a snowball. I shit on God!"

Anatolly looked up at Kristof, blaming him for not managing his patient.

Kristof shook his head. No more sedatives. But to the cap-tain it seemed she could stand a rather large dose.

"We're dead already, Anatolly Razo," she growled, "a fact you have failed to notice since you yourself have been dead for decades."

The scene was attracting attention, as med personnel peered in from doors and the gaggle in the corridor pressed heads in to observe the fracas.

It was not going well, this little scene. The crew didn't need this hysterical pessimism. At his side, Sandor was whispering for him to withdraw, to send flowers from hydroponics.

Anatolly turned from the distraught woman and addressed his real audience, the hospital staff and his officers.

"Now listen to me." He had had enough. It was time for a speech, and a damn good one. Or a loud one, at any rate. "We're not going to die. We've come too far for too long to give up now. We are going to do what we've always done, and that is to carry on."

"Horse shit," came Tereza's comment.

Ignoring her, he raised his voice and swept the room with his gaze, staring down the doctors and nurses, and the startled patients in their beds, as well as his gawking staff.

"We will set to work. We will immediately dispatch another shuttle and resume our research. The sooner we understand what we face, the sooner we will overcome it. I'm putting Lieu-tenant Jozsef Mirran in charge of the primary shuttle for imme-diate deployment to the surface. See to that." He nodded at Sandor. "The rest of us will work with the samples Lieutenant Bertaks shuttle is bringing in. And we will provide succor and strength to each other—especially to those recently bereaved—not hopelessness and despair."

He strode from the room, muttering to Sandor, "Send flow-ers to that woman."

Breaking through the knot of officers, Anatolly headed back in the direction of the bridge.

Lieutenant Andropolous latched on like a burr. "Sir, Janos Bertak wishes to speak to you."

"Tell him I'm in the head," the captain snapped. "And tell him my decision."

"But what is your decision?"

"Zoya goes."

He made for the head and slammed the door behind him. Walking to the sink, he doused his face in cold water. In the mirror he saw an old man with white hair and a few jowls. He drew himself up, tucking in his chin, but it was no use. Tereza was right, he looked halfway to the grave. Her words stung, be-cause he felt the truth of them. He had been middle-aged when elected captain, and he was now older by far. He was always decades behind—or ahead of—the young and virile men who looked to him for leadership. What kind of grip could an old man have on *Star Roadl A* weak one, he thought. But it de-pends on your high-wire act. Part of which was making tough decisions and staring down detractors, by God.

He dried his face and turned away from the sink. Zoya would go. She had language skills and the power of persua-sion. She could not be intimidated, and yet her first thought would be to forge a peaceful tie. So Zoya was an emissary after his own heart, and Janos—was not. Besides, Tereza needed her husband beside her. Janos might rather fight snow witches than be at Tereza's side in the mood she was in, but by God, he would follow orders.

Zoya would be their emissary to this underground city they called a preserve. And to these Ice Nuns, whoever they were. For the first time in centuries the People of the Road had others to deal with besides themselves. To risk Ship Mother in such a venture was no small matter. She had already sacrificed so much for them... all semblance of a normal life, for one thing. But to bring them home, it would all be worth it. Zoya had confessed as much in his arms many decades ago, as they lay drowsy and spent.

The decision, now that it was made, felt right.

He liked the symmetry of Zoya being the first to greet these ancient cousins of theirs. But he feared that the current denizens of earth had few solutions. From all indications, they had no advanced civilization. It would be Ship's science team that must tackle the questions of survival, of a viable colony.

In what lands remained. For as long as they remained.

### **CHAPTER TWO**



Crouched behind a crystal information stack, Swan watched the woman. The nun, dressed in black robes, knelt in the cen-ter of the hall working with her instruments. She was oblivious to him, assuming herself to be alone. But he had been watching her a long time here in this place, this great hall of Ice. The heart of Ice.

The towering walls of the cavern were broad planes of Ice. Looking into their depths was like peering into an ocean from the side. It nearly took his breath away—what little breath he had in his present condition—to see how pure and deep Ice ran. And it was very bright with optical activity. Ice had not grown slothful in its gigantism. Here and there, towers and stubs extruded from the floor in variations of

rhomboids and cubes.

It was not a good thing, that Ice had left that tunnel in place. But he'd known Ice had a tendency to follow existing shapes where it encountered them. It simply surrounded existing geometries, strengthening them with its own micro and macro shapes. It was why the preserves weren't crushed. And why coretext wasn't obliterated.

He ran his hand along the crystal facets near him, feeling their sharp edges. How thin his fingers were, like five sticks, and so pale. A little nourishment and sunshine were in order. It had been a long time.

The woman still labored with the device that Swan guessed to be an interface. It failed, of course. And from what he'd stud-ied about her, this Mother Superior Solange Arnaud wasn't used to failure.

She looked up at the planar, translucent ceiling, as though gazing heavenward for inspiration. Her short white hair glinted in the sporadic brilliance of the cavern. Though over sixty years old, her face had a mature beauty, her frame remained trim. Often women remained fine at sixty—and this one was beautiful. All to deteriorate, in the hands of time. That was the way of all flesh, a forlorn destiny.

Now was a good time to reveal himself, when her failure might soften her. He knew Solange Arnaud was not often soft.

Swan didn't look his best. His complexion was chalky, and his attire—well, decent clothes were low on his priorities when he'd made his preparations. In fact, his current state was little short of repulsive. He'd looked in a mirror. His long hair, once yellow, had bleached to pale silver. The impression was dis-tinctly albino.

She spun around, sensing movement.

Swan stood, holding on to the stalagmite for support.

"Who are you?" she demanded. Her voice came off well in the hard-surfaced chamber. As she frowned at him, the fine lines around her mouth and eyes deepened, proving that good genes could only go so far.

"A friend," he answered. "To you. To Ice." His own voice sounded like shards of ice. He coughed to warm up his vocal cords.

She drew herself up, straightening her black robes. The finest cloth. Compared to most, the Sisters of Clarity lived well.

"How did you get here?" she asked. She was in fine control of herself, not to react to his physical appearance.

"I live here."

She let that pass. "If you are a brother, tell me your name."

"I'm not. But Swan."

"A strange name, Swan." Her voice was creamy, like her skin.

He had his bearings, and stood away from the wall. Solange was tall for a woman, but he had eight inches on her, at least. She had to raise her chin to look up at him, but still she showed no apprehension.

"Your interface failed," he said. "Again. I understand your frustration."

Her voice dropped a few degrees in temperature. "I very much doubt that you do."

Swan wished to move past such posturing. The quickest way was to put on a light show. A small one might do. He touched the wall. A lavender splash of light came to his hands from the depths of Ice. In the purple glow, his fingers looked like neon tubes.

Her eyes flicked to the display. This oh-so-minor display. He had her attention.

"Solange—may I call you Solange?"

"Certainly not." But she was staring at his hand.

He let the glow subside. "Well then, you must tell me what to call you. Mother Superior won't do. It smacks of—hierarchy."

"It's supposed to."

Silently, he called on Ice for a simple math proof. In an-swer, a coral line of light snapped from deep in the wall straight to his palm. Ice followed that with a brief flash of crimson, and the equation was clear to him. He had her ab-solute attention. All that she hoped her device might do, Swan could accomplish with a touch. All that her order had sought for over several thousand years lay in the palm of his hand, so to speak.

Yes, she was interested. She walked slowly toward him, looking at him, his clothes, his rail-thin condition. "You may call me Solange, then," she murmured, an arms reach away. "What do you want, Swan?"

He rather imagined at that point he could have anything he wanted. And he would require everything, eventually, but not yet. "The ship..." He paused, waiting for her to show under-standing. The nuns had as much to lose as he did, with the ar-rival of the ship. It was no doubt why she was here, at coretext; one last go at Ice before her dominion was challenged.

"It upsets me," he finished, sounding more peevish than he wanted to.

She laughed, a deep, musical laugh. "Yes, it upsets me too."

"The ship is one of the old generation ships, Solange. From the time before Advent, as you call it. They're upset by what they found. This is not what they expected."

"So we might assume. But how do you know?"

"I've been monitoring their radio communications. Haven't you?"

By her expression, she didn't like to be caught wanting. "Their communications are scrambled."

"Yes. But not to Ice."

She narrowed her eyes. "Not to you."

"No, not to me.'

She looked around the hall, the architecture of Ice, and spoke in a hushed tone. "You have broken Ice's encryption, then."

That was close enough for now. "Ice has no secrets from me." He assumed that was true, but Ice was on

a new scale these days.

"No secrets..." She was processing the notion. Looking at him with new respect—no, with what might be *longing*.

Swan continued, "My interest now is with the ship. Its crew fears Ice. Such a vessel must have great powers of technology to use against us. Against Ice. Would the Sisters of Clarity want that?"

She didn't hesitate. "No."

"The ship is counter to my goals as well." He looked down on her. He had spent his whole adult life looking down on peo-ple from his remarkable height. But he must remember that *small* didn't mean *weak*.

"You haven't told me who you are, where you come from," she said.

"Perhaps when we get to know each other better." It was a foolish thing to say, flirtatious, almost.

From the twitch of her mouth, she didn't have an interest in getting to know him better. Well, why would she? She wanted to know, but not to know *him*.

She persisted in her curiosity. "What is your goal, Swan?"

"Let's say that I wish for Ice to grow and develop—further. To achieve its full potential. I believe you share that goal. Am I wrong?"

She wasn't used to people second-guessing her, and didn't like it now. But, "No," she murmured, "you're not wrong."

She greatly counted on people being wrong about the Sis-ters of Clarity. For millennia, they had used the trappings of the Church to confuse and confound. The nuns looked like a spir-itual society. They pretended to be, at least in a humanitarian sense. God, of course, had nothing to do with it. But that was well, that the sisters were nonreligious. Swan had enough ob-stacles without confronting God.

The order was a phenomenal success. Brilliantly co-opting the surface of Catholicism, they created a garment for their own agnostic philosophy. Its roots lay in the twenty-first century's cli-mate of breakneck scientific change, with its deeply troubling genetic, medical, and environmental dilemmas. These were dis-turbing to the Church, and to many people of faith. The Church began to speak out against science without a moral rudder. Against a materialistic life without serenity.

Meanwhile, the order of the Sisters of Clarity—at first just a small think tank—began styling itself as a contemplative soci-ety, aspiring to divert human civilization from its science-based trajectory to one of ethical and moral purpose. An alternative to religion. Learning from the failures of other Utopian soci-eties, the sisters adopted the organization and hierarchy of the most successful institution in human history: the Catholic Church. Rather than fight it, they imitated it.

It was ironic how the Church hastened its own downfall. In an effort to update, it had undergone a makeover propelled by the Lifestyle Encyclical of Pope Innocent XIV The Pontiff re-moved a number of troubling theological burrs, and pruned ar-ticles of faith to a few key messages.

The unintended consequence of the Encyclical was the ease with which believers could transition to the order. The Sisters of Clarity had the rituals, the hierarchy, the high purpose. All one had to give up was God.

Swan had to admit he admired the sisters. It was why he was dealing with them.

Continuing, Solange said, "But that's not all we want."

"Yes, you want access to Ice." That was how he would con-trol them. By metering their access to Ice.

She looked wary, careful of being mocked. "Yes."

"A high calling."

"There is no higher." It brought a flush to her cheeks. She had the look of an idealist. Or a fanatic, more like. "What gives our lives meaning, Swan? How can we guide ourselves and our technology? Or find freedom from life's torments? Or find tranquillity?"

"Leave that to religion, perhaps." He couldn't help the lit-tle jab.

She ignored this. "Religions disagree. Religion becomes faith, dogma. We aspire to be unfettered by devotion. If we're devoted, you could say it's to philosophical truth."

"You've had a long time for philosophy. No answers yet?" It was fun to goad her. She was so earnest.

"Nothing ultimate, nothing lasting. I fear we've reached the limits of the human inquiry. We need the next larger thing."

"Not God, then."

She managed to say with decorum: "No."

The next larger thing. Swan considered. Such philosophical pursuits might be programmed into Ice. Ethical judgments, discernment about human happiness—complex operations, indeed. It nudged up against ideas of consciousness. When does subtle "thinking" arise from sheer computing power? Does it ever? It was an old dilemma, and one he didn't need to resolve. It was only important that Solange believed Ice capable of it.

He spread his hands, looking around him. "I can share this with you, Solange. I *will* share it. There is no limit to the com-putational powers of Ice, at the size it is. At the size it will be." To himself, he admitted that size wasn't the only factor in intel-ligence. The human mind was extraordinary because each cell with its DNA was, in a sense, like a computer, with the ability to replicate the entire organism. By contrast, at each point in Ice, there was possible only an on/off decision. So, even at the size it had become, Ice wasn't like the human mind. Still, he couldn't help but feel flattered by the notion.

He could see by her rapt attention that she would grab the bait. He said, "The ship, however, will be against us. Gener-ation ships don't come back unless they've failed. So natu-rally they want the old earth. Trees, fish, commerce, war—the usual."

She nodded. "We've already seen that they're capable of vio-lence against us."

Yes, that shuttle. So the sisters knew about that. They had excellent sources.

"What do you propose?" she asked.

"An alliance. To achieve things of the spirit for you, things of... Ice for me."

"An alliance? Between you and me?" Her gaze swept over his ashen face, his attire.

<sup>&</sup>quot;You have your philosophical interests. Meaning, et cetera."

He took a breath to calm himself. Oh, no doubt she would rather not have such an ally. Such an unkempt pariah. No doubt she was used to more refined company. And to uncon-tested control. And she might still doubt him.

He stepped forward, grasping her arm. "Yes, Solange, you and me." She smelled of soap and flesh. He placed his free hand on the nearby plane of Ice.

Light came to him, erupting into his palm. "That is the language of Ice, dear lady. It is a communion that I di-rect." He pulled her closer. "What would you know from Ice? Ask me."

Her eyes flared violet in the light storm.

"Ask," he whispered, close to her face.

Between lips held thin across her teeth, she whispered, "If you command Ice, tell me the names of my predecessors. The mothers superior. All of them."

He began to speak. The names tolled down the decades, the centuries. Though the list was long, it was too easy. This sort of thing was the least that Ice could do.

At last she covered her ears, pulling away. "Enough."

He was panting from exertion. He needed to lie down.

"Why do you need me—with all this power?" Her gaze took in the chamber of coretext.

"Because I'm alone." That was the truest thing he had told her. "You have resources: your nuns, the inhabitants of the pre-serves. Your soldiers."

"I have no soldiers."

"The brothers."

"I hadn't thought of them as soldiers."

"Now that the ship is here, perhaps you should." His voice shredded for a moment, and he swallowed. It was warm in the cavern. He felt sweat pop out on his face as his stomach clenched in one of its contractions. It was hunger, of course.

"You are not well, Swan."

"I'm fine."

"I think not. You're sick. I think you need me."

"I've said so, woman."

She pressed her advantage. "You will not dismiss me or summon me. If we work together we'll be equals."

He nodded, acquiescing. She didn't quite understand the gulf that separated them, and he didn't want to argue about pecking order.

Still, she hesitated. "There should be some—amity—be-tween us, Swan."

"Amity," he murmured, feeling ill indeed. "Things of the heart, yes?" But when he thought of heart, Ice

came to mind.

"Yes. Come, embrace me for a surety."

He paused, not wanting to find himself engulfed in her black robes.

"A seal for our alliance?" She spread her arms.

Sweat poured from his scalp and armpits. He stepped for-ward, towering over her. Embraced her. The scent of flesh was strong. Then he pushed her away, to keep his mind on busi-ness. "If we're done with *amity* . .."

"Of course." One corner of her mouth turned up. Perhaps she was satisfied that she'd made him obedient for a moment.

Then there was strategy to discuss. For taking on the ship. For taking over the ship. She warmed to the topic quickly.



Solange knelt in the sanctuary, knees cold, mind heated. It was supposed to be brisk in the chapel, to aid in mental clarity while the nuns and postulants sat their meditations. Yet despite the bracing cold, *clarity* eluded Mother Superior tonight. Her thoughts were all of Swan, Swan... the man with the name of a bird, the man with the control of Ice.

The image of Mother Superior Carmen smiled down on her from the chancel surrounding the altar, her holographic pres-ence selected at random from the hundred revered laureates. Mother Superior Carmen's only claim to laurels was a minor improvement that the society overvalued. She had died young and still beautiful, another thing Solange held against her. Easy to be deemed a laureate when you hadn't had time to stumble.

At the rear of the chapel her attendants had been standing for the better part of two hours, with no cough or fidget. From early childhood her nuns had trained in standing meditation. For the purpose of mental clarity, as was everything.

Solange shifted her position and continued her meditation on the one called Swan, and her conversation with him. She had stayed kneeling until she was able to recall each word.

She recalled the man's violet fingers, shot through with the thoughts of Ice. She hadn't let him see her stunned reaction, hoping to hide her own inadequacies. Swan wasn't fooled.

He had access to Ice, she did not. Simply stated, this was the power equation.

Who this man was, where he had come from—these questions preoccupied her. Had the preserves produced the ge-nius the Sisters of Clarity had failed to find within their own ranks? His clothes and sickly condition argued that he was from the preserves, yet his accent and manner of speaking was cultivated. By his eyes, he was tainted with madness, or per-haps it was only a terrible pain. If the man was dying, she must learn his secrets quickly.

But he'd told her nothing. Nothing beyond the litany of the Mothers Superior and the other tests of knowledge that she'd put to him before their interview concluded. Whatever he knew of Ice, it was far beyond her own knowledge. And, there-fore, it was a good alliance. Together they would bring the great ship to heel, take command of its technology and the loyalties of its crew. That would take care of the threat from space.

Then there was the threat from Swan.

She didn't intend to ally with such an individual past this temporary crisis. He was unsavory in the extreme—reeking, arrogant, and unstable. No, he wouldn't do as an associate. He could never be a *sister*, nor could he be a brother, unless he bowed to her. Gender was unfortunately against him. That and his madness.

But none of this could dampen her exultation.

Behind the stronghold of the Keep an uplifted slab of Ice sheltered her order, but until today it had kept a silent watch. Now she felt herself on the precipice of a world change, an Ice change. Every Mother Superior hoped that in her lifetime the Enunciation would occur. Since the Advent of Ice, the lineage of mothers superior had been waiting, the order had been wait-ing. Now it truly seemed that Ice had spoken. It was just a mat-ter of getting Ice to speak to her.

A flicker of light in the nave caught her attention. A different laureate stood there, Mother Superior Betheny Marta. The old sow stood dour and pious, but she was better than Mother

Carmen. So far the sisters saw fit to ignore Solange's accom-plishments, denying her elevation. But to preside over the *Enunciation*. There could be no greater accomplishment, no surer path to the laureate. Of course, such an honor was a small thing compared to the higher calling of her order. It must not divert her from her mission. Nothing could divert her. They were on the verge of the next world, the world of mean-ing, the world of—

A thud came from the back of the sanctuary. She turned her head a fraction, signaling that an attendant could come for-ward.

Hurrying to her side, an attendant said, "Sister Verna. She fainted."

Sister Verna was old, arthritic. "Give her some water."

"Yes, Reverend Mother."

"And have her stand an extra hour."

#### **CHAPTER THREE**



Zoya braced herself firmly on the shuttle access ramp, slick from blowing sand. She was weighed down with a satchel con-taining extra clothes, tube food, and a radio pack. A good sup-ply of water was already loaded on the sled.

Sand pelted her face from a gust of wind, harbinger of a storm. Not a good time to set out, but the sled driver, who gave his name as Wolf, could not be persuaded to wait. He stood by his sled, eyeing the shuttle and its gun ports uneasily. She hadn't thought before how daunting the shuttle was, its metal bulk bristling with armaments.

Behind her, Janos was muttering something.

"Can't hear you," she told him.

Janos leaned in, determined that she *would* hear. "Be in con-tact every day. We'll monitor constantly. No hasty decisions. You'll be directed by us."

By my captain, she thought. She said, "Of course, Janos," giving him a rather fine smile of reassurance.

"Forgive me if I'm skeptical," he said.

Skepticism she could handle. It was his hostility she'd rather do without. She felt sorry for Ana tolly, with such a first mate. There was no end of trouble when an indecisive captain had an overbearing first mate. But Anatolly had surprised both of them by delivering his swift verdict that Zoya would be the one to go.

So then, go she would. And judging by the expression on

Wolf's face, it could not be soon enough. He stomped his feet, ostensibly freeing them from snow—he called the crystal sand *snow*—but he was impatient to set off before the storm arrived in earnest.

Hearing of the sand storm brewing, Janos had made one last run at the captain, arguing for delay, but the captain was in the head. Again. Zoya smiled at Anatolly's ingenuity. But she wasn't smiling over Janos. He urged delay, hoping for more time to dissuade Anatolly. But time was precious, time was land—colony land—now falling to the advance of crystal. The People of the Road had no time to argue among themselves. But a self-ish man, an ambitious man, always spent liberally on himself.

It was a fact that she didn't truly know this man. After all, only a few people now alive were around during her last awak-ening, and Janos Bertak had not been one of them. That, how-ever, never stopped her from making snap judgments. It was all she ever had time for, anyway. She was used to awakening amid strangers, and taking their measure. But of course to a gypsy, only a nongypsy was ever a stranger...

Janos stood next to her now, scowling. No smile, not even to say good-bye.

There were not many men in Zoya's considerable experience who could not at least be brought to smile with a little wheedling, but this Janos Bertak was one.

She had to raise her voice in the freshening wind. "You mis-judge me so, Janos. You hardly know me."

"Your reputation goes before you, Ship Mother."

"Ah, the race with one's reputation is never won." She loved the old sayings. They always carried more weight than new ones. "So embrace me for farewell, Janos Bertak."

He hugged her with all the warmth of an automatic seat re-straint, pressing her head against his neck, pinching her ear where the translator lex nested.

It was time to board the sled. She was leaving behind the confines of Ship life and the close company of her people. Her children, so she felt. It was a momentous thing, yet she was ea-ger to go. Three of her people lay in shrouds in that shuttle, and that was only the start of the dying unless they found a way to come fully and truly home. Perhaps their future was, af-ter all, in some bleak, buried city such as this sled-driver spoke of. But their dreams were of land and sky and green living things. So Ice, as Wolf called it, could not have it all.

She left Janos on the shuttle ramp and approached the sled.

It was in two sections. The forward sled was motor-driven, with short forward runners for turning, and long runners in back and on the cargo sled. On the sloping backs of both sleds were arrayed solar panels linked to storage batteries. Wolf said that on a full charge the vehicle could travel one hundred kilo-meters. That was an advanced solar collection system, indeed. The preserves, he said, made "good machines." She would see.

The sled driver was surly and suspicious, and getting him to talk in the first place had rather been like coaxing juice from a prune, but perhaps he was overawed by the shuttle and all he had surmised of the ship's technology.

The drivers sled had a traction drum mounted between the runners. This rolling drum was studded with traction spikes, which, connected to the motor with a drive belt, propelled the sled. The vehicle started and stopped as the driver pressed or released the accelerator. Behind a badly scratched but transpar-ent windscreen, the driver could sit or stand while steering. Wolf must have been standing when she had seen him float to-ward the ship to confront the marauder.

The back section, linked to the front by a hitch, was piled with supplies and braced with a short railing. It bore the body of the man Wolf had killed, the man who had wreaked such havoc, and whom Wolf had been pursuing, he said, for a long string of such crimes. His use of the term snow *witch* was dis-concerting; crew tried to shrug it off, but they didn't want to touch the body, and Wolf had to load it onto his sled by him-self. He was happy enough to do so. There was a price on the outlaw's head.

Wolf watched her approach. Zoya had already noted those blue-gray eyes, alert, suspicious. He wasn't eager to have her as a passenger, but it was a short ride, after all. She stuffed her pack into the back sled, where he had arranged a space for her to ride. She unfastened one of the ropes that bound his sup-plies and wound it around her pack, careful that the precious radio was well padded from what she could predict would be a jolting ride.

Wolf gestured for her to get in the sled. Around his neck hung an amulet, shiny black, elaborately carved. Up close, she noted the threads of gray in his beard and his well-seamed face. Bits of sand shaped like flecks of mica collected in Wolf's beard as the wind blew more steadily, driving a haze of particles across the flats. He looked to be about forty, but his body was hardened by physical exertion and a life on the surface. He could easily overpower her if he had ill intentions, and against that possibility Janos insisted that she pack a gun. She did so, if only to please him.

She scrambled into her seat. No sooner had she straightened her legs under the forward compartment than Wolf threw a tarp over her head and began lashing it to the sled.

"Hey wait!" She pushed the flap away, meeting Wolf's stony blue eyes. He muttered something.

Her translator lex said, "Storm will take your head off." Well, they'd have to deal with idioms, of course, but she got the picture. He might have told her in advance that she should hunker down during their journey under an odorous cloth streaked with unimaginable stains.

After a moment he was back with two metal struts that he affixed to the side of the car in clamps. Over them the tarp now descended, making a tent over her head.

"I'm ready," she whispered to her ear lex. And it told her the New English equivalent, which she called out to Wolf. In an-other moment the sled motor hummed to life, and they were under way. She wiggled her hand under the tarp and waved to Janos. She imagined him waving back, saying, "Go with God, Ship Mother."

The image caused her to laugh out loud. Her ear lex squeaked back. Translators never knew what to make of laughter.

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The sled had just enough room for her to shift her weight and pull up her knees if she wished, but surrounded by packs, she was limited to a narrow slot. Her sense of confinement was not helped by the

fact that right behind her lay a dead body strapped to the sled's supplies. Though it was not particularly macabre, neither could it be considered good company. Cer-tainly Wolf was no company; he barely spoke to her. During their last stop he stared at the lex nestled behind her ear. Per-haps she had failed to explain adequately what it was. Or per-haps he was staring at her diamond studs.

Zoya tried peering outside from under her protective cover, a maneuver that entailed slouching in her seat and craning her neck enough to challenge an owl. Swirling clouds of sand darkened the sky, turning the white landscape gray. With her visibility all but obliterated, she could glimpse the terrain only in snatches. Here and there the tundralike landscape was inter-rupted by odd formations: upright forms like stalagmites. Some of these stacks had flat, jutting planes for sides, and oth-ers were studded with smaller facets of cubes, tetragons, hexa-gons—which the science team said might and *might not* reflect atomic structure...

The crystallographers were cranking out one theory after another, including one to explain the strange pulse of light the shuttle crew had seen in the ground the previous day. In a kind of piezoelectric effect, they said, mechanical pressure on crys-tal over many square kilometers of territory might generate enough voltage to produce a discharge. Zoya watched for a re-peat performance, but for the time being the land lay inert.

Abandoning the attempt to see through the sand storm, she gave herself over to the language tutor, concentrating on vo-cabulary, always the hardest part of languages for Zoya. Vocab-ulary was like calisthenics, while grammars deep structures were a heady dance. It wasn't long before she silenced the lex and allowed the glide of the sled to lull her.

The sled's runners churned up a shushing sound, like the wind in aspens. It didn't do to ask herself how long since she'd heard sounds like it. There was Ship time, earth time, and her time. She didn't measure her life as most people did, by year or decade, or the height of children. She had no decades in the usual sense. No children in the usual sense. So it didn't do to ask *how long*. The only answer was *too long*. Despite this, she re-membered everything perfectly. Trees. Wind in the green leaves.

They had left all that behind, had fled the killing, taking their unique genome with them; the DNA with which all their troubles had begun. Their oppressors wanted her people's ge-netic secrets. But in the way of the world, they ended up killing what they wanted. Such was envy. And the terror of the times, to see Europe brought low by a virus in forty years. The Ram-page picked and chose its victims. It never chose the gypsies. Envy decayed into hatred of those who were immune. Thus followed the containment camps, the disinfecting raids, and those quiet barracks where blossomed the generic cruelty that grew so well in specific flesh.

Now those killers were long dead. All the old terrors were purged. The sterile world bore no viruses, no marauding hordes. The new terror was the land itself. And it was almost worse than the old enemies. It was like a parent who turned away—or who became something else entirely...

Shushhhh, shushhhh went the sled runners. Through her slit window she could see that the day was ending. Lexicon: *sunset*, *dusk*. Yes. And the New English was...

She heard a grinding whine. The sled motor, she thought. But no, it came from behind her.

It was the wind moaning. Then louder. Zoya twisted around, listening. The sled charged on. The groan rose and subsided like a drowning man bobbing in a sea. It could only be the black-haired man. She shouted for Wolf. Surely he must have heard, must have realized that their passenger wasn't dead after all. Unless someone had jumped onto the sled.

As they rushed on, Zoya fumbled at the tarp lacings, managing to loose one side and stand half-upright.

Behind her, the moan ramped up to a ululating cry.

Through blowing grit, she saw Wolf at the helm, driving with one hand while he twisted around to look behind her.

In alarm, she also turned, but the cargo area was aflutter with wind-whipped cloth and ropes and the long hair of the former corpse. She whispered to her ear lex and got the words, yelling to Wolf over the wind and the awful bellow of their pas-senger, "Stop! He's alive."

"Alive, ohhhhh alive," came the creature's wail, as though lamenting his new condition.

Wolf turned back and continued driving.

The sled bumped and swayed while the mortally wounded man lay roped facedown over sacks. Around them the biting wind conspired against any intention she might have to crawl back and help him.

She found herself trying to tip over the sled. By swaying her body from side to side she managed to rock her sled car from one runner to the other. In the next instant Wolf leaned back and, using the blunt end of his harpoon, shoved her squarely in the chest, toppling her backward.

She scrambled to her feet again, crying out, "Please stop," forgetting to translate.

Wolf cut the motor, bringing the sled to a stop. In the sud-den quiet, he slowly dismounted from his perch and ap-proached her, glaring.

She was there on solid ground to meet him. "He's not dead," she growled at him. To that, the creature's wailing offered am-ple proof.

"Good," Wolf said. "Worth more that way."

In the steady wind, the tarp was flapping like a captured sting ray.

"He needs help. We have to help him."

Wolf stood unfazed by her plea, his eyes looking like they'd long since been frosted over. "The snow witch is beyond help."

"Beyooond," came the cry. "Oh, beyooond." The boom of the wounded man's voice was very strong—too strong for one with such a wound. It gave her a shudder to hear it.

Wolf turned to remount his sled. She rushed after him. "This man is in terrible pain. We have to *do* something." The wind snatched her words and scattered them, while pummel-ing her face with particles sharp enough to leave dents.

Wolf looked up at the sky and his nostrils flared. Then he withdrew a very large knife from a scabbard at his belt. He pointed the handle at her.

"Then kill him for mercy."

She took the knife.

"Quickly, packs are coming. They hunt at night."

She stood with the huge blade, not knowing whether to hand it back or strike him with it. After a moment of mutual glaring, Wolf marched back to his sled. He put his hands on the steering wheel.

He wouldn't dare.

Foot to the accelerator, he eased the sled forward.

She called out, "I paid! You owe me a ride!"—or some equivalent her ear lex coughed up.

"Good knife 1 gave you," Wolf shouted back at her, as the sled pulled away.

Zoya began to jog next to the sled. Then she was running as it gathered speed, finally throwing herself at her car with one foot dragging on the Ice. She heaved herself halfway inside the sled, swearing and suffering the awful translations in her ear. "Shut the hell up," she snapped at it. The loose end of the tarp beat on her with a brutal whipping motion.

Behind her, the snow witch bellowed, "Knüüüfe."

In her graceless lurch onto the sled, Zoya had accidentally rammed the knife into the pack that formed her back rest. Out of it spilled what might have been flour, forming a cloud of choking dust. The sled pounded along at a renewed speed, jar-ring her to the bone. She left the blade in its new scabbard and, grabbing the corner of the tarp, held it around herself, fending off flour dust, pelting sand, and singing corpses.



Anatolly lay in his bed wasting a badly needed sleep period. It was his age, and the pressure. Perhaps he should step aside, let a younger man lead them through the terrors of this homecom-ing. A younger man came to mind. But did they need youth or experience?

He gazed resentfully at the view screen, watching a real-time display of earth. He already knew his altered geography. The mountain chains still gave evidence of themselves—rumples in the smooth coat of Ice—good markers for the former conti-nents: the Rockies and Andes in the western hemisphere, the Caucasus, the Himalayas, and the Alps in the eastern. And down through Central America, the contiguous isthmus of Ice, connecting the global Ice halves as though trying to stay in touch. Theories sprouted like mushrooms as to why the equa-torial zone remained free of Ice. None of them stuck.

But it was a temporary puzzle; soon it would all be Ice. And in a mere three months, they forecast, the shrinking lands in the Sahel would be too small to support them. Then they would be forced to live on the crust itself.

"Star field," he voiced, changing the view, and his position in bed.

Even this view kept him awake. The stars were icy failures, too. No fallback plans in the stars—no habitable planets de-tected along the ill-fated path *Star Road* had taken.

Someone was in his cabin. A movement, a dark shape. Anatolly sat up.

"Captain, wake up."

Janos Bertak was at the side of his bunk. "What is it Janos?" He called for light, swinging his feet over the side of the bed.

Janos handed him his pants. "Results from the samples. Word is leaking out, and the crew is alarmed."

Anatolly pulled on his clothes and splashed water in his face. The chronometer showed it was the middle of first sleep, so it must be a crisis. It was the way of Ship life that the worst things always happened

when the captain was asleep.

As they left the cabin together, Sandor hurried up to them, shaking sleep from his eyes. "Go back to bed," Anatolly told his assistant. Leaving Sandor behind, he and Janos set out down the corridor. His first mate's smooth head shone in the corridor lights. The receding hairline made Janos look a decade older than he was, a fact that gave Anatolly some satisfaction. It was petty, but there was no fighting a gypsy mans natural vanity.

"What about the samples?" Anatolly asked, as they walked.

Janos spoke low to avoid others' ears. "It's what they're call-ing quasi-crystal. A form halfway between crystal and glass."

He was talking about the crustal material. The lab had been poring over the samples ever since the shuttle returned.

"The crew takes it badly, sir. People are saying it's an impos-sible structure. Alien at best, mystical at worst."

"Mystical?" Good heavenly Lord. Anatolly knew how a Catholic ship, once started down the road of *mystical*, could build castles in the air—or devils out of dust. "Who's leaking this? Why wasn't I informed?"

"One of the crystallography techs spoke to his wife. That's the source of the leak. Too late now."

"How did we get from quasi-crystal to voodoo?" They rounded the corner into the science section, and headed for crystallography.

"It's because—if I have it right—the molecular structure is five-sided. And that it can't be."

"Well, why can't it be?"

"Because a five-sided structure can't cover a surface without irregular gaps. But there aren't any gaps. So the crew is talking an act of God. Or godlike aliens."

Anatolly's heart was plummeting. Of the choice between God and aliens, he would much prefer aliens. Although they'd never met any, Anatolly was always prepared to accept their existence. But miracles of God, once stuck in die craw of a religious crew... Now that could get out of hand. They'd fended off miraculous revelations several times on Ship, and they were better off for it.

The lab crew looked up as he entered. They were grouped around a table, drinking coffee and looking remarkably cheerful.

He scowled them into more sober countenances. Taking a seat among them, he nodded for Vlad, the chief engineer, to begin. Vlad was brilliant, and looked to be about twenty years old, Anatolly thought. He sincerely hoped Vlad wouldn't get bogged down in the math.

"The electron diffraction image gave us quite a surprise," he began without preamble.

"Keep it simple, Vlad," Anatolly murmured, reaching for coffee.

"Well, it's *not* simple." The engineer ran his ringers through shocks of reddish brown hair. "OK, you know how you can't tile a floor with pentagons?"

Anatolly stared at him. He had never tiled a floor, nor ever thought of doing so with pentagons.

Undeterred by the blank stare, Vlad went on: "Well, trust me, you can't do it, not without leaving irregular gaps. We thought this mantle we're dealing with was crystalline. And crystals are unit cells stacked in repeating patterns. But there aren't any repeating patterns possible using five-sided units. Which is what we have here. They're rhombohedrons, sort of like skewed cubes." He paused, looking at his colleagues. "You can't tile with these things unless you use two types of units of different shapes. And even then the sequence of patterns would *never* repeat itself. So, by definition, that's not a crystal. It's what we call a quasi-crystal. It's never been seen in nature, and at the magnitude we have here, it's just not possible."

Anatolly wished they would stop saying that what obviously existed was impossible.

Vlad brought up a holographic projection at die table's cen-ter. The image rotated. "Our sample of the stuff shows we've got a material that appears the same when rotated by one-fifth of a circle." He paused to let that sink in.

For Anatolly, it didn't sink far.

"Ergo, it's five-sided."

"Get to the point, Vlad. Tell me why my crew is going nuts over Madonnas and mysticism." He regretted saying that, but it was the middle of his sleep period, not theirs.

"To cover the globe with these units means that, since the patterns are nonrepeating, you need to know the positions of very distant units to make it all fit. Which, if this is naturally occurring—and it's hard to imagine that it's all planned—is damn difficult if not impossible. Contradicted, if you will, by the laws of physics." The hologram began tiling, creating what appeared to be a random design.

Anatolly muttered, "Well, maybe we need a new law to cover this one."

"It's not that we're missing a law. The laws of physics out-right prohibit it. Something called nonlocality, events in one place simultaneously affecting events in another. Prohibited. The second law of thermodynamics would argue for disorder, not some convenient rules that happen to organize something this complex."

Anatolly took in a huge chest full of air and slowly let it out. Ah. The mysticism part.

Vlad continued, "And here's another weird thing—it's made up of silicon, iron, aluminum, calcium, sodium—the con-stituents of the earth's crust—and yet it's creating just one kind of molecular pattern. Quasi-crystal. And as for the external shape—the crystal's habit, as we say—well, we're seeing the gamut of crystalline symmetries." He looked around at his col-leagues and shrugged. "That's about it for now. We've just scratched the surface." Several others around the table smirked at the crystallography witticism.

Anatolly allowed himself to scowl. "Who's spilling the beans—or the crystals—to the crew?" He glanced around the circle as the evident culprit, Milo, stared at a coffee stain on the table.

Janos Bertak spoke up. "We'll give an update to the whole crew between shifts in a couple of hours." He shrugged. "We couldn't have kept it from the crew in the end, anyway."

Milo looked grateful for the reprieve.

Anatolly saw that in comparison to Janos, he was coming off as peevish and confused. Well, damn it, he was peeved and confused.

Anatolly turned to Vlad. "So what's your best guess as to what caused this quasi-crystal? Or allowed it

to form, or con-tradict physics, or whatever you say makes it impossible?"

"That's actually several questions," Vlad said, scrunching up his forehead.

"Then answer them one at a time," Anatolly snapped.

Vlad killed the holo display. "OK, first of all, I have no idea what caused it. That's a question for later." He dipped his head apologetically at the captain. "As for how the physics works, it's math I'm afraid."

"Without the math."

Vlad paused.

Anatolly had always thought if the techs couldn't explain something to a bright ten-year-old, they didn't understand it themselves. He waited.

"Maybe we're not seeing all there is."

That's an understatement, Anatolly thought.

"Maybe in higher spatial dimensions—say in six-dimensional space—quasi-crystal is regular, only we're just seeing part of the pattern in three dimensions." He waited for the light of recogni-tion in his captain's face, but a stoical gaze met his.

Janos said, "Vlad, the captain is looking for something to calm the rumors. To let the crew know we're on the problem."

Vlad looked vexed. "All I have are theories."

Anatolly said, "Well, give me one then, something simple, one we can explain to the crew before someone suggests an act of God's punishment for whatever we've done wrong lately."

"Right." Vlad pushed back a lock of hair that flopped for-ward. "It could be, say, some aspect of quantum mechanics. Something operating at that level could organize things geo-metrically over limitless areas."

Anatolly breathed a sigh of relief. "Better. All right, quantum mechanics it is, then."

"But..." Vlad began.

"And sound convincing when you talk to the crew. Call it a working hypothesis. And for God's sake, don't look like a man who's just seen physics fall apart."

"Yes sir." Vlad opened his mouth, then shut it again. Began once more: "That's not all."

Anatolly waited. He could always wait for bad news.

"There's another aspect we should mention. That pulse of light the shuttle crew saw. If it was generated by the quasi-crystal..." Vlad looked uncomfortable, but plunged on. "It sounds strange, but it could be related to data."

The room was very quiet. His associates were avoiding eye contact, staring at coffee mugs.

"Go on," Anatolly said.

"We can't help but think that the structure, globally, has a high information-storage capacity, with

enormous algorithmic complexity. A normal periodic crystal has low algorithmic in-formation content. A quasi-crystal pattern is largely random, and so it has the potential to be information-rich. Rather like DNA, if you see what I mean."

"DNA? Are we talking a physical material or a living thing here?"

"It's not alive, no. I just used it as an example of randomness and information content."

Anatolly frowned. "Let's not use that analogy."

"Yes sir." He scrunched up his mouth. "How about informa-tion macromolecules?"

"Gods Blood, I don't know!" Anatolly took a deep breath. Vlad was doing his best. "What does the light pulse have to do with information storage?"

Vlad looked at Janos for help.

"Well?" Anatolly demanded.

Janos said, "The light could carry information, rather like an optical computer does."

"Computer," Anatolly repeated. He looked around at the silent crystallography team. "Optical computer or quasi-crystal computer? It can't be both." By the Virgin, it couldn't be either one, he thought crossly.

Vlad shrugged. "Actually, it *could* be both. The optical pa-rameters of Ice provide an excellent lasing medium, depending on the direction of the crystal planes. Kind of an opto-crystal platform. It would be capable of massive parallel computation."

Anatolly turned to Janos, hoping for some clarity. "How much of this is fact and how much is guessing?"

Janos said, "Guessing about the computational aspects, sir. Not guessing about the quasi-crystal structure." He looked at Vlad for confirmation of his summary and got a nod.

Anatolly stood up, calling the meeting to a close. "Explain the quasi-crystal aspect to the crew at shift break, in the audito-rium. I'll be there, and I don't want to hear about crazy physics or crystal computers. Tell them the truth, but keep your wilder theories in this room." He paused, softening his tone. "Thank you, Vlad, that was helpful."

He and Janos left the science team to their theory-building.

Despite Vlad's quasi-crystal display and talk of impossible physics, the thing that stuck in Anatolly's mind was the notion of information storage. He thought of the view of earth he'd been looking at earlier, that isthmus of Ice stretching over Cen-tral America. A link between the halves. There was some rea-son the equatorial lands were mostly Ice-free... and some reason why they soon wouldn't be. He was fairly sure the clo-sure of Ice boded ill in more ways than one.

#### CHAPTER FOUR



When the mining team broke through to the vault with the rich source of rubber, a frenzy of pushing and shoving broke out.

Kellian Bourassa found herself taking refuge inside one of the motor coaches. The strike was a fantastic event for Ancou preserve and soon the Group of Five would come down to the dig to see for

themselves. Meanwhile, the workers were using the discovery as an excuse to break off work and carry on, prancing on the roof of the coaches, rolling rubber tires back and forth across the floor.

Her back ached. She wasn't built for manual labor, and she was adapting to it badly. As she allowed herself a luxurious slump into the cushioned seat, an exhalation of dust greeted her. Some of the coaches they'd found over the years were in pristine condition, but this one was musty. No doubt its door had lain ajar since the First World.

The instrumentation panel would soon be scavenged, and that was a shame. When the disassemblers pried away every usable part, the purpose of the items would be lost in a pile of discrete pieces. Kellian gazed with longing on instruments meant to measure speed and efficiency and location. Some of the purposes of the instrumentation were well-known. The "kph" on the dials registered the fantastic speeds of the Ecos in their motor coaches. Some of her friends had seen sections of the broad paths dedicated for the purpose.

She traced the buttons and levers around the steering wheel. It would have been delicious to exchange ideas with this coach-builder, whose knowledge so far exceeded the common tinkering of the preserves. Tinkering, that's as far as Ancou pre-serve got, as far as it would ever get. Few could appreciate her mobile intelligence units—as far as Ancou was concerned, her obo was a flop.

Don bent into the open doorway. "Kellian, where have you been? People are looking for you." Don was a distant cousin, with creamy brown skin, much lighter than Kellian's charcoal darkness. "You're wanted topside."

"Who wants me?" Kellian scrambled out of the motor coach.

Dori paused for effect. "The nuns."

Kellian's stomach tightened.

"Maybe they'll give you a chance, Kellian," Dori said, trying to soften the news.

Kellian swallowed hard, then plunged through the crowd toward the elevator shaft. Someone called to her, "You in trou-ble again, Kellian?"

"Probably," she muttered. As she passed her obo, parked in the corridor, she summoned it to follow her. She hoped it would make it up the shaft without frying the elevator circuits.

Kellian still had grime under her fingernails when she walked into the great hall that her preserve had given over to the nuns for their interviews.

The Hall of Ice Eyes was in darkness, except for the far end, where two of the great electric chandeliers were lit near the sis-ters. Kellian walked toward her interview, her obo at her side, creaking and mumbling. She tried to summon her wits. Her mother's hasty advice still rang in her ears. *Be nice*, *Kellian. Those sisters won't brook impudence from a twenty-two-year-old misfit, especially if she's arrogant. Be nice*.

She would try very hard. It was her last chance.

Slabs of Ice protruded through the gaps in the vaulted room, gaps they called windows in the first age of earth. Near-est the chandeliers the incursions danced with reflected light, lighting up a profusion of tiny surface crystals.

There were two of the child-stealers waiting for her. Unlike other preserve families, the Bourassas had

never given up a child to the sisters. It was a measure of Kellian's disgrace that they hoped to do so today.

"Now who?" the older sister said.

"Kellian Bourassa, Sister," the assistant said, reading from an activated scroll.

The nun looked Kellian up and down. Though well over sixty, the woman appeared to have all-porcelain teeth, at least in front. A gnarled hand rested on a cane with an ornate han-dle. A finger was tapping, tapping...

"I am Sister Patricia Margaret Logue," the nun said. "I'd like to speak with you, Kellian. Don't be nervous, just answer me the best you know how." Sister paused. "You will say, 'Yes, Sister.""

"Yes, Sister."

The other nun was young and cross-looking. She rolled up the scroll and placed it in the folds of her robe. It was said the nuns carried all manner of tech about themselves, and the scroll reader was an example. They came to the preserves, snapping up the smartest recruits, setting them to the great task of their order: to interface with the computational pro-grams of Ice. Someday, when the nuns programmed Ice to re-treat, the preserve would dig through Ice as easy as scraping algae from the paddies.

"You have a noisy obo, Kellian," Sister Patricia Margaret said.

"A noisy machine lets people step out of its way."

"Better that it avoid humans than humans it, don't you think?"

"No, obo3 is young, so it's better being free to explore."

The assistant seemed displeased with that answer, but re-ceived a calming hand wave from her superior.

Sister Patricia Margaret raised an eyebrow. "I understand the last time it *freely explored*, your obo blew a circuit that jeopar-dized half the preserve."

"Power was only out for twenty minutes, Sister." And the obo got a priceless lesson it would never forget. But for her, the price had been banishment to the digs. It was a harsh sentence, imposed by the Group of Five themselves. They had long since given up on her, as her experiments failed to yield anything useful. Hypotechnic, they called her, suited for labor, not in-vention.

The Group of Five couldn't see past their potbellies.

The younger sister didn't look happy with anything Kellian said. Or perhaps she was just unhappy to be in the preserve, surely not the luxury she was accustomed to. She brought a small lace hankie to her nose now and then, as if the preserve actually smelled bad.

"Sister?" Kellian spoke to the head nun. "Can my obo go walking? It isn't often it gets the chance to learn in here."

Sister Patricia Margaret waved her hand in permission.

Kellian looked down at her invention. "Go now, obo3. You can walk about."

It left her side, wheezing and scraping. Luckily it turned to the side and didn't go bumping into the sisters.

"Thank you, Sister," Kellian said.

"You won't ask questions though, Kellian. I will ask, you will answer."

"Yes, Sister."

The nun stifled a yawn. "Sister, bring Kellian a chair. She's tall, and I'm too weary to stand just now."

The assistant brought Kellian a chair, leaving it just out of reach.

Sister Patricia Margaret beckoned to Kellian, and she hauled the chair closer and sat down.

"Your betters think you waste your time, Kellian. Your obos are always bumping into walls and self-destructing. But I'm more open-minded. So tell me why you build robots without intelligence."

"My obos learn, Sister."

The side of the nun's mouth quirked into her cheek. "Slowly, it would seem."

"That's true. But my obo is building its own chain of reason-ing. I'm not guiding it, it's guiding itself. But that takes a long time. Like a child learns, Sister."

"like the human brain?" The sister kept a neutral tone, but the reaction of the assistant was unmistakably contemptuous.

"No, nothing as fine as that." Kellian knew better than to claim something so extravagant.

"Don't play coy with me, girl."

Kellian didn't care for the tone of voice, the sharp commands from this old woman. If they knew so much, why did they comb the preserves for talent? But she managed to say, "No, Sister."

"If your machine learns, isn't that like human learning?"

"A little like that. But right now obo3 gets all tangled up in what it knows. I'm slowing it down so it can attack problems without getting overwhelmed. That means sometimes it doesn't make much progress." In the recesses of the hall she heard obo3 crash into something.

Up went Sister Patricia Margaret's eyebrow again. "Interface with Ice is our goal, Kellian. Not robotics."

"But, Sister, if I could devise an artificial intelligence in an obo, then maybe you could talk to Ice in a different way." She saw the skepticism in the nun's face. "At the keep, you use su-persmart computers to try to talk to Ice, but I think that's the wrong direction. Best to start at the bottom." Kellian was used to people not keeping up with her. But this nun, like all of the nuns, was highly educated and scientific. She would not, for example, ascribe to superstitions about Ice being a godlike power, nor to myths about Queen Ria and Winter. At the keep, all would be strictly scientific.

The nun twirled her cane, and light glinted from its han-dle—a metal sculpture in the image of a First World bird. "I like the bottom-up approach, Kellian, don't mistake me. It's just the mobile part that seems a dead end."

"But how else can an AI unit learn? It has to encounter the world."

The fingers of the nun's left hand were tapping, slowly, me-thodically. She was not impressed.

"Sister," Kellian said, feeling the interview slip away from her, "some people decide on the goal, then set their programs to pursue it. But I think we should go explore and see where we end up."

The nun glanced in the direction of the noisy obo. "Walk about?"

"Yes, Sister."

The older nun sat back, and either her back or the chair creaked. She sighed, closing her eyes for a moment. The inter-view was over, it seemed. After a time Sister Patricia Margaret looked up at her assistant who moved her chin to the side a fraction of an inch. *No*.

Kellian was going to lose. But she couldn't go back to the shovel and the cramped excavations. She was made for think-ing, not toiling.

"Sister," she blurted out, "why do you come hunting in the preserves, if you don't want new approaches?"

Sister Patricia Margaret was staring down the length of the darkened hall, following the progression of the obo by the noises it emitted.

Kellian went on, "You've got to crash about sometimes, if you hope for something new." It was awful to beg, especially under the smirks of the young nun.

Sister was gazing at her intently, as though searching for a sign.

Kellian was aware that she had a bad reputation, that she was older than the nuns liked for recruits, that her future de-pended on this nun's whim. "Please," she said, swallowing her dignity.

"Well," Sister Patricia Margaret drawled, "I'll take you, I sup-pose."

"But Sister," the young nun began.

The other waved her off. "I'm too tired to argue. I've been at this all day, Sister. We'll take her. If worse comes to worst, she's strong and can work in the kitchen." The old nun stood, smoothing her black robes around her.

Kellian thought, Thank God. Unfortunately, she also said it out loud. A spike of stomach acid greeted her mistake. The nuns were devout atheists.

"Don't thank God, young lady," the sister said, "thank me. God has nothing to do with it."

Kellian could not bring herself to say, Yes, Sister. She re-mained silent.

Narrowing her eyes, Sister Patricia Margaret said, "We will expect obedience, Kellian Bourassa." As she swept past her, heading for the door, she added, "If you come with us, please leave your *gods* behind."

HI *take you*, the nun had said. She was in. Kellian grinned at the younger sister as Sister Patricia Margaret left the room. She was in, but she'd have to watch her step. She had no intention of abandoning her faith, but she'd keep it to herself. The sisters were touchy about God.

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Palm to Ice, Swan called for light.

Cloaked in shadows, he had followed an icy arterial. Ice was quiescent here. But he summoned a flow of data, and this was enough to lighten the tunnel. He trudged on.

Stronger now, Swan roamed farther from his little den in the Heart of Ice. It was remarkable, these elaborations Ice had made to coretext in his absence. Originally, they had called the place coretext. But that was engineers for you. Swan preferred Heart of Ice, with its ring of strength and poetry.

Hunger bubbled in his stomach. While exploring, he was on the lookout for a cache of food. He'd exhausted what little he had. Perhaps he would find a pantry stuffed with canned goods, or a meat locker. OK, maybe the meat locker was a re-mote possibility, but the engineers *did* work here at one time and might have left provisions—freeze-dried meals, candy bars, dried fruit, cans of tuna, sardines, peaches, beans, that sort of thing. Some might still be edible.

He was in dreadful shape, but he resolved to be patient. Af-ter ten thousand years of suspended life, one did not become—animated—in four days. Aside from his general weakness, he'd noticed that he entirely lacked a sense of smell. Ice would have to fix that. Because of the arrival of the ship, Ice had awakened him early, not quite ready. Bad timing indeed. What was the ship called? *Star Road*. An odd name. And they had wasted no time in coming to the surface, sending a crew member to one of the major preserves. From the radio transmissions, it was a woman. Solange had a delegation at that preserve. *Leave the woman to me*, she'd said.

So he would, for the moment. A familiar euphoria came upon him, a giddy yet simple happiness. He was alive. Alive, when so many had died. He had escaped the bad death of his associates, poor bastards, and the great death on the surface.

His stride grew longer as he passed side tunnels where Ice, itself giddy with what it could do, exuded its body.

The whole of coretext was a grand construct, a palace. It had its own brand of symmetrical beauty, one that pulsed with infusions of light, depending on the logic sequences of Ice. Not even the designers could have said what Ice was now, or how much it had accomplished. Ice knew many things, yet it didn't know that it knew them, so it couldn't quite convey the whole of itself. It responded to queries. So he must think of the right questions. OK. All in good time.

Swan stopped to gaze into a side gallery. Something odd about the place.

Entering, he stopped to get his bearings. Around the perimeter of the trapezoidal cavern something was buried in the wall, behind a flat plane of Ice. Perhaps it was a cache from the time before. He walked forward and knelt in front of the nearest window. Inside, was an oblong form of black. Hand on the ice bulging overhead, he brought light to the place.

Lying inside was a woman. Around the woman's neck a heavy circlet chained her to her pallet. His stomach rose in nausea. Fighting the urge to run—he mustn't run, it could break his bones—he drew closer.

The woman inside was alive. One had no need to chain the dead. She was cocooned, imprisoned. His stomach twisted around itself as he leaned over and retched bile. Tears sprang out of his eyes, and his nose sprayed the contents of his stom-ach, all acid.

He backed into the rear of the gallery, staring at the display before him. The other six windows all revealed a similar hor-ror. Women—they were nuns by their dress—all chained and waiting—for what? Why chained? He gulped air as the cavern walls seemed to squeeze together, forming a ditch around him.

Memory came back to him, heralded by the stench of rot-ting flesh. The ditch, the great, deep ditch where...

He fell to his hands and knees, and began crawling out of the chamber.

Only it was a ditch, an unspeakable trough where he was trapped.

There were too many bodies to bury, during those weeks when the virus stalked the town, killing and killing. The townspeople came and took his mother and father and brother and threw them in the big truck with all the other bodies.

He was eight years old. He was so sick they thought he was dead as well, and into the truck he went, and then it was lifting up in the air, and down they slid into the great ditch. People in the streets were crying and screaming, demanding proper bur-ial for the dead, but soldiers kept them back.

When he struck the ground, he fell next to a foot protruding from the dirt, where yesterday's dead lay covered with a shal-low layer of soil. He jerked away and groped toward the bank of the trough, crawling, scrambling over bodies.

Finally reaching the bank, he cried for help, but the soldiers laughed and shoved him back down with shovels. "If you're not dead yet, you will be." He climbed up, and they pushed him down. Up, and pushed down again. When they tired of the game, they raised their rifles to stop him. Then he slunk away under the shelter of the overhanging bank. When night came, he managed to haul himself out and run away from the mass grave.

He waited nearby for his parents to climb out too. If he could come back from the dead, so could they. But they wouldn't come. *Father*, he called out. *Mother*. They had always been with him. Where were they now? How could they stay dead and not come to him, wrapping him in their safe arms? Darkness engulfed him, and his body filled with tears. When the hot, salty water got as high as his eyes, tears spilled out. Near dawn, when he saw dogs and birds feasting in the pit, he began to run, and then he couldn't stop running.

He ran through the streets of Copenhagen, shunned by peo-ple who were afraid of him. Afraid of one come back from the dead. But he wasn't afraid anymore. Once you've died, you don't have to again.

Now, here in the Heart of Ice, the living were buried once more. He slumped against the wall. A cool mask covered his face, where the sweat had congealed. His stomach felt like it had been stapled to his spine. But sense was returning.

He asked, in the subvocal manner that was as swift as thought: *Who buried these women*? But he got no answer. Ice, which knew so very much, didn't know everything.

Standing at last, he considered smashing the windows, lib-erating the poor creatures, rending apart those circlets and chains. Perhaps they would truly die when taken from their vaults; perhaps they would thank him with their dying breath. That image was a comfort. He thought that when he was stronger, he would do just that.

Swan shuffled back to his quarters, stunned by what he'd seen. He thought it could only be Solange Arnaud who had chained her own people. To what possible end? That she could subject her followers to such torture made her a more terrible ally than he had imagined. And she dared to talk of ethics. A strange and chilling mix, that woman.

He reached his den. He had returned unsuccessful in his search for food. Picking up one of the cans that lay open on the floor, he pulled back the flap of the lid and peered inside. It was empty, except for flecks adhering to the sides. He began licking it clean.

A steady, scouring wind beat at the lean-to Wolf had devised against the side of the forward sled. Their passenger was un-conscious again, and bound in the rear sled in Zoya's former place. She had treated his wound as best she could, but there was little she could do.

To escape what Wolf called *the pack*, he had taken them up into a region of hills, stopping on a promontory from which they could look down on the valley. The man insisted there was a pack of animals in the vicinity, a notion that Zoya found both exciting and unsettling. His word for the creatures, however, was beyond her translator as yet.

The radio transmitter crackled:"... the storm, if it gets worse. Over."

"What's that?" Zoya asked, "What about the storm?"

"... send the shuttle, if necessary. Over."

Wolf, digging in a sack for food, glanced at her, as though he understood the words, *send the* shuttle, and disapproved.

"No, no need," Zoya said, "We're snug in a tent, waiting it out." In any case she didn't want to jeopardize a shuttle during a storm like this, though it was sweet of Anatolly to worry.

"KhkkkhMi," sputtered the radio.

Zoya enunciated: "Can't hear you. Everything's fine, Anatolly. We're having lunch, actually. Zoya out." She shut down the radio and turned to face Wolf.

He had laid out a simple meal. For the sake of goodwill, she was sharing it with him, trusting her inoculations. She smiled at him, and said "Thank you," in his tongue. The dried meat was tough, but savory. Clearly, there were animals to be hunted somewhere, and that was more heartening than anything.

"The storm will hide our tracks. And our scent," Wolf had said. Nevertheless, he craned his neck now and then, listening.

She wondered what else he might be listening for. It was perhaps a good idea Janos had, to bring that gun.

A noise outside, a soft flapping sound, caused Zoya to jump.

Wolf said, "Snow collapsing from a stack."

He called it *snow*... and it did seem more apt from a visual standpoint, if not a molecular one.

She took another morsel of meat.

"Where do you come from, Wolf? Where is home?" She whispered the words to her translator, and took its rendition. The phonetic inventory of Wolf's language was changed yet fa-miliar, more a dialect than a different tongue.

"No home but Ice," he replied right off.

"Everyone is from somewhere. No family?"

"No."

She gazed at him. "That's sad."

His face looked younger in the shade of the tent, and the lines of his face, softer. But his eyes were sterile blue—not un-friendly—but nothing more, either.

"Where were you born?"

"On Ice."

"Some people live—on the surface, then?" she asked.

"Traders do. Not many. On the barrens, you die young."

"The barrens?"

He spread a hand, indicating the snowy land.

She asked, "The snow witches live on the barrens, too?"

Wolf pulled a bone toothpick from one of his coat pockets and dug at his teeth. "Until I catch them."

"Why do they choose to roam the surface?" It was hard to imagine they found many travelers to loot—and murder.

He narrowed his eyes, pausing as though doubting she could know so little. "It's their way," he said finally.

"So you hunt them down." She took another piece of meat. She wanted to keep him talking, and it was surprisingly good jerky.

"One in particular." He gouged at a piece of food lodged in his teeth. "Snow Angel, 1 call it."

"Ah, a grudge, perhaps?"

He offered her the toothpick, which she declined. Some-times, when he didn't answer her, she thought she had spoken poorly, that he didn't understand her. At other times she thought him openly evasive.

"What was the crime?" she asked.

Replacing the toothpick, he began repacking the remains of their meal. After cinching the pack closed, he turned to face her. "The snow witch killed my family."

Zoya nodded slowly. "I'm sorry." Sitting there next to him, she felt a moment of openness between them. "Children?" she asked, hoping there weren't.

"Two," he said. "Two children. The witch showed no mercy."

"Why did—the witch—do such a thing?"

He shrugged. "It's what they do. Until I catch them."

So, there was the story. Sorrow and revenge. She felt an ache for him. And knew better than to show it.

They were quiet then for a long time, listening to the fine crackle of grit blown against the tent. Wolf turned his head, lis-tening intently. When he listened like this, his eyes seemed to cloud over, as though he gathered all he had into one sense, leaving the others abandoned.

After a moment he got up and left their shelter. She rose too, stepping out into a high wind, thick with pelting sand.

Wolf was standing a short distance off, on a promontory overlooking the valley. With his barrel chest and his great fur jacket, he looked like a bear reared up on hind legs.

When he came back, she asked, "The pack?"

He nodded. "Close." He walked back to the rear sled. Throwing off the tarp, he gagged the unconscious passenger, then replaced the covering.

Zoya watched him, knowing she had pushed humanitarian measures for a witch about as far as she could. "How many are there?"

"Thousands."

Zoya peered into the frenzy of blown sand. Thousands. She had taken some comfort in being armed. That comfort sud-denly grew cold.

The storm blew unabated. In their shelter Wolf cleaned his har-poon gun. He had a small vial of grease, and used an old cloth to rub down the weapons components.

Zoya's own gun lay on the floor before her. Black and lethal, the weapon could do some damage. But against a horde...

Wolf narrowed his eyes at her. "The pack won't find us. I know them too well."

She realized she must look worried. Trying to sound calm, she said, "Good."

He began cleaning one of his harpoons—a thin but sturdy-looking projectile as long as his forearm, sharpened to a nasty point. "You aren't used to hunting. Or being hunted." He rubbed the metal shaft. "In your great ship you had no ene-mies."

No packs. No witches. But perils enough. "Not like this," she admitted.

He looked at the gun lying on the ground between them. She thought he would ask to hold it, but he didn't.

"Some threats are invisible," he said. "In the stars."

That startled her. What could he know of such things?

He nodded toward the roof of the tent. "There is a great darkness above us. So it is said."

"Darkness?"

"It can kill. That's why people hide under Ice. But I am pro-tected." His hand went to the amulet around his neck. A reli-gious talisman, perhaps.

"Tell me how it kills," she said. "This darkness."

Outside, the winds were subsiding to intermittent gusts.

"I will tell you a story of the darkness," he said.

She brightened. "My people love a story."

He nodded, approving. "This is the story of Queen Ria and her child." Setting the harpoon aside, he gazed at the tarp of their enclosure, summoning his thoughts.

"In a golden time of a day," he began, and then waited to hear the lex. Faithfully, the translator did its work. He went on, "a time that will never be seen again and yet will be, there lived in a certain country in the stars a prince. He was boastful, but powerful."

The lex spoke to her, and Zoya smiled. Who would have thought the sled-driver had such a beginning in him?

He went on. "He was the Prince of the Darkness. He ruled over the stars, but he wasn't content. He wanted the earth un-der his power as well.

"Knowing the danger, earth sent the Queen of Light to do battle with the Dark Prince. The queen—her name was Ria— left the earth to fight the prince in the star fields. Before she left, Ria had to hide her child, little Shinua, because she knew the easiest way for the Prince to defeat her would be to threaten her child. She loved this child above all else. Therefore, she must hide him well. She hunted the world for a safe place, searching the deepest caves, the world seas, the roots of the biggest mountains. Still, she wasn't satisfied.

"Finally, she went to find Old North, a magic being of fear-some reputation. Ria begged her to hide her child until she came back. Old North agreed, in return for control over earth in the queen's absence.

"That's how it came to be that Old North cast a spell of winter over the land, and cloaked the child in Ice. And that's how it came to be that the child Shinua waits for his mother to come back, when she will be victorious over the Prince of the Darkness.

"When that day happens—and not before—the child will wake up from his sleep. He will bring a new spring, and then all people and all animals will emerge from Ice and walk the earth once more, under the blessing of the Queen of Light."

He nodded in some satisfaction. "And this is a true story."

She hoped that it was. It was a more cheering story than she expected from this sled-driver. And it was a good story to be-lieve in. "Where did you learn that story, Wolf?"

"My ancestors," he replied. "If you listen, you can hear the stories."

Zoya smiled. That was how she told stories too, listening in memory to her aunts and grandfathers telling the old tales.

Wolf straightened, suddenly at attention. His eyes went cloudy, and together the two of them were utterly still.

Driven by wind, grit pattered at their tarp.

"Stay here," he whispered. He scrambled outside, taking his harpoon, but Zoya was right behind him, gun in hand.

Outside, the wind blew chill, and her boots sank into the sand up to her ankles. Through scudding clouds, she could glimpse an achingly blue vault of sky. Wolf crouched at the edge of the promontory, looking down into the valley. When she joined him, he pulled her flat, next to him.

In the valley was a shadowy mass where none had been be-fore. After a moment she could see that it

was a moving swarm of creatures, flowing swiftly like a river bearing leaves. Their feet sounded just like wind-shot sand. She could see neither a beginning nor an end to them.

"What are they?" she whispered, but they both knew she didn't understand the term he'd been using.

Rather than talk, Wolf extended a finger and drew a picture in the snow.

It was a quite remarkable likeness of a rat.

Racing to beat the sunset, Wolf stood in the driver's spot, steer-ing the sled with single-minded fury.

Zoya ached in every known joint, thanks to the grinding bump of the ride and her cramped position beside him.

With the storm passed, she had her first clean view of the pervasive crystal. For a long time it had been a vista of white land and acutely blue sky. Now, however, they were in a region of closely packed stalagmites, like a petrified forest of forma-tions four or five meters high. The stacks were nearly translu-cent, clearer at the edges, more occluded in the centers. Here and there, they were shot through with brownish stains that might be iron oxides. From the sides of the formations pro-truded a mix of crystal shapes—skewed cubes, diamond shapes, rhombohedrons—often on the same stalagmite, lend-ing a sense of wrongness to the structures, as though the shapes were random—or part of some excruciating pattern. And though each stack was different, they were at the same time impossible to tell apart, their shapes being too complex to remember and compare.

And add to that, some were lit from within.

From time to time, light burst into a formation, only fleet-ingly, but enough to confuse. At first Zoya thought it might be the setting sun refracting in the crystal. But soon she became convinced the source was internal.

"Wolf, what are those?" she asked, pointing.

"Shinua's dreams," came his answer.

More legend. "Yes, but what are they?"

He steered around one, not lit up. "Shinua's dreams," he re-peated.

And from their passenger came the gargling sound that eas-ily pierced the drone of the motor, "Shinuuuua, Shinuuuua..."

The man's wailing had accompanied them for many kilome-ters, thanks to Zoya's winning the argument with Wolf over the gag, which she feared would asphyxiate him.

She wondered if the light effects were piezoelectric, as before. Pulses of light—red, purple, green, blue, gold—mo-mentarily sparked in the upright stacks, sometimes vivid, sometimes muted, depending on depth. It was not so often as to dazzle, but enough to keep her watching, wondering when it would occur again.

It had its own kind of beauty, this new face of earth. An ex-quisite mineral beauty—cold and assured. How strange that this white land could hold at once such loveliness and such death. If there was life in crystal, it must be a realm above or below human, alien to flesh. Zoya had seen such cold finery before, in the star fields and cloudy wonders of nebulae. The eye was stunned, and the mind humbled, but the heart... the heart wished for moist, black soil, red rocks, and the splendor of trees. It was what they all

wanted, it was why they came back.

And it was almost too late. Three months, Anatolly said.

That was a cruel offer. It seemed willfully cruel. How could they have arrived—as it seemed they had—at the very last chance? It was too great a coincidence.

Zoya was not accustomed to invoking fate or magic to solve problems. But fate or magic wasn't the only possibility, nor even the best one. She saw *intention* in this. Intention of human origin. As Ship Mother, she knew about people and desire. So she did wonder, *whose intentionl* 

She couldn't help her suspicious nature. Nor her hopeful one. They would stop Ice, force it to retreat. So her heart said.

They were deep in the crystal forest, cut off from the hori-zon, surrounded by stacks glowing intermittently, catching Zoya's eye. As evening came on, the lights became annoying, causing her eyes to see spots even when she closed them.

But if Zoya was disoriented by the bewildering forest, Wolf seemed to know exactly where he was going. They raced on, leaving the stalagmites behind, and entered a broad, flat plain that seemed to be the prevailing landscape of Ice. The ground, blown clear of sand in places, had a glassy look, taking on a slight blue tint from the sky. One hundred meters below was the old earth. She imagined crushed forests and hidden rivers, all imprisoned and forgotten, supplanted by this crystal season. She was the only one who remembered the old seasons. Irra-tionally, she felt that if she died—or forgot—it would all disap-pear. That above all else she must remember.

Wolf steered around the occasional obstacle, crystal facets that jutted from the planar surface like an afterthought. The sled bumped furiously over smaller obstacles, causing her stomach to churn from a lunch she now regretted.

"The food you gave me—it was rat meat, wasn't it?" She wasn't surprised to hear the dying man take up a counterpoint:

"Raaat," came the wail. And then higher in pitch, "Raaaaaaat."

"You ate plenty of it," Wolf replied, eyes straight ahead.

"You could have told me it was rat."

"You didn't ask."

She took a deep breath. They were both tired. Her bones ached, her muscles spasmed, and her mind was pulpy from the lex tutorials and the snow witch's incantations.

The glare of the westering sun turned a bright geography into a blinding one. Closing her eyes, she rested them. On her eyelids played the afterimages of iridescent towers, luminous plains.

The sound of the electric motor changed. They were slow-ing.

Zoya shook herself alert and stood up to look over the windshield.

They were approaching what looked like a black lake. Five towers punctuated the perimeter of the lake. As they drew closer, she could see that a wire fence connected the towers.

"The preserve," Wolf announced.

He steered the sled closer to one of the towers. She saw that the lake was not water at all, but a dark expanse of green scum.

"The food mass," Wolf said, noting her interest. "They grow some food. The rest comes from the food benders." He cut the engine, and they dismounted. Wolf strode back to the cargo sled and, throwing back the tarp, exposed the snow witch to view from the tower.

While they waited, Zoya noted that the towers bristled with forms that were surely gun barrels. Several of them had swiveled and pointed directly at them and their sled.

The sun disappeared behind distant peaks, plunging the ivory world into a blue-tinged gray.

At last a door in the near tower opened, and out stepped two robed figures. One was a gray-haired woman who pre-ceded a younger one. Approaching the sled, the older woman took in Wolf, Zoya, and the wounded passenger in turn with a calculating gaze.

By their robes—and even more by their bearing—Zoya took them to be the *Ice Nuns* that Wolf had spoken of.

"Wolf, it is well to see you again," the older woman said.

"Sister Patricia Margaret," Wolf said in greeting.

From the rear sled came an incoherent wail.

"He's alive," Wolf grunted.

Zoya stepped forward. "I am Zoya Kundara."

The sister showed no surprise. "You are a stranger here, by your accent."

"I hope to find a welcome, with your help."

"Many come to the order for help." Her eyes went back to the snow witch. At a gesture from Sister Patricia Margaret, the assistant approached the babbling man and, opening his ragged coat, fumbled at the bandage over his wound. He writhed, but his restraints held him firmly. After peering closely at the wound, the younger woman made a gesture to the older one.

"Half-alive," came the pronouncement from Sister Patricia Margaret.

"Noooo," the creature moaned.

The sister drew a bag from the folds of her robe and dug in it, bringing forth a handful of coins. She placed them on the engine compartment of the sled.

"Half payment," Wolf said, and spat into the snow.

Sister Patricia Margaret drew two more coins from her purse and lay them beside the others. "Next time bring me a healthy one."

Wolf swept the coins off the housing into his hand.

"What will happen to this man?" Zoya demanded.

Ignoring the question, the nun turned back to the tower, signaling several others to come forward.

Zoya placed herself in front of the nun, making eye contact. "I want assurances of my patients safety."

From the tower came a group of four nuns, carrying a pallet. The sister leaned on her cane. "You are forward, for a guest."

Zoya thought the nun knew about Ship. And was not im-pressed. But guest did not sit well with Zoya. "We hope to stay."

The nun smiled. "May your plans be wise as well as true."

"And what are your plans for the man you just bought?"

Having gathered up the wounded man, the nuns were bundling him back into the tower.

The older nun held Zoya's gaze. "To free the world from pain." She turned and walked away, having the last word. For now.

As the evening darkened, the air turned chill. Zoya looked up into the sky. Lights flickered. She stared. But there it was again.

Tall and steep, light fell down in a streaming cascade. Puls-ing an incandescent green, lights painted the northern sky. There at last was a light show she understood. The aurora bore-alis.

Wolf nodded at the display. "The Queen of Light," he said. "Her promise to return."

He ignored the event, and Zoya guessed the aurora was a common event amid the augmented electromagnetic forces of the new earth. But for her, the display brought on a moment of hushed awe. She would have stayed to watch, but Wolf urged her back into the sled. He drove them a few hundred meters to the nearest tower. The moving cataract of light glowed deeper against the night. Zoya fancied the Queen of Light was shaking out a blanket, its folds shimmering like a flaming curtain. Sleep now, all will be well.

But that was a mistake: to sleep. The land slept. Only a few people walked the earth, engaging its dream time, stalking witches, murdering children. For all its peacefulness, the realm had its nightmares. Time to wake, Zoya thought, Queen Ria or not.

Wolf nudged at her arm. "Best to go in."

He led her inside the tower, into a cramped stone room. A trapdoor lay open on the floor, and a ladder disappeared into the depths. A rising column of warm air carried the stench of urine and rot.

Zoya strapped her satchel onto her back to free her hands for descending the ladder. She paused before the gaping hole down which the sisters had somehow borne their captive.

"Wolf, I thank you for the ride and your protection."

For an instant his eyes flicked to meet hers.

"It was a difficult journey," she said, "but I wouldn't have you think me ungrateful." She smiled at him. "Do you?"

He shrugged. "I got a snow witch. And good boots."

If she was any judge of the man, there was a hint of warmth behind the stark words.

"May those boots carry you safely and far," she said, smiling.

As to the snow witch, she was less certain.

Turning to climb down into the hole, she saw Wolf secure the tower door, throwing the bolt. Then she descended the lad-der into the depths, each step taking her deeper into a thick stew of reeking air.

## **CHAPTER FIVE**

**i**\_

Solange Arnaud stood in front of the small, gnarled tree. She caressed the needles, brimming with their potion of chloro-phyll, the elixir that turned sunlight into energy. So far as she knew, this was the only tree on earth, and the thought of its value, both aesthetically and genetically, thrilled her.

Hands came around Solange from behind, opening her lounging robe, cupping her breasts. "Come back to bed."

His deep voice stirred her, and she allowed him to lead her back into the bedroom, where, apparently, his needs were re-bounding. She was happy to meet them, flattered by his desire, given the difference in their ages. Her own arousal was no small matter, either, though he had satisfied her once. He was a treasure to her, fully as much as the bonsai tree. For all of her cloistered life Solange had kept chaste, until now, until this man proved he could take her into the ways of flesh. Flesh, the uncharted world. She could lay aside her black robes. Lay aside thinking. The pleasure was arresting, but it was transformation she wanted. To leave the self that thought, planned, worried, analyzed. Only someone who had lived within those ordered halls for sixty years could understand the lure of a hidden door. Behind that door, the new land had its own rules and inevitable, sure instructions: *touch here* ... be still... *move now*... *hold... release*...

She had spent her whole life looking for clarity. She had begun to wonder if, sadly, it lay only in the body. Well, if it did, then she would seek it with this lover.

"Mother Superior," he said, mockingly, dropping her robe from her shoulders.

"Brother," she answered, her tone strict.

He guided her onto the bed, not worried about protocols. "How may I serve you?"

She told him. But he had his own ideas, and they were even better than hers. That he disobeyed her was part of their play. All so forbidden—although Solange was certainly not the first mother superior to take a lover in this bed. She might well be his first female lover. She hoped she was. The brothers satisfied each other, it couldn't be helped. But she kept a strict eye on her girls. And the punishments were terrible, of course.

So when he came to her chambers, she was the beneficiary of his rather insistent demands.

It was not strictly ethical. She felt disturbed by that. It espe-cially troubled her to punish couplings between postulants and brothers. But postulants were in training. Their minds needed discipline, the rigors of the order. Flesh could come later, when it was less distracting. And brothers, of course—well, their minds were not an issue.

Afterward, he lingered in the darkened doorway, wanting to say something. But she discouraged talk. She didn't want him to lie to her, about affection, about what it meant. In the world of the body, *meaning* wasn't necessary.

He left, closing the door.

As her mind gradually came back to claim its property, she bathed and dressed. Once in her black robes, she was in think-ing mode again.

The crew member, Zoya Kundara, had reached the preserve. Sister Patricia Margaret, forewarned by Solange over their se-cure radio channel, had met the woman. She could be trouble, sister reported. Her moral guidance system would not mix well with the Sisters of Clarity in the matter of the snow witches, and perhaps much else. It was so like sister to take the woman's measure quickly. It came of long practice, recruiting novices.

Sooner or later, Solange would meet Zoya for herself. Mean-while it was best to cultivate backups. Zoya Kundara might be brought around, but if she was hostile, one must find more re-ceptive individuals. In an institution—and of course the ship was an institution as well as a vessel—there were always fac-tions. She would delay meeting Zoya until she knew better the lay of that land.

There must always be backups. If Swan proved false in his promises, then perhaps the ship had superior technology for in-terface. So the ship was both a threat and a potential resource. That was often the case in the world, in its disturbing ambiguity.

Swan's vision of a military raid by the brothers was artless and dangerous. Force could only produce a temporary victory. No, she would take the ship as she had taken her position as Mother Superior, by persuasion. Always a consummate per-suader, she felt newly inspired by the Ice change that might—oh, *might*—now be within reach.

Before leaving her suite, Solange paused before the door, smoothing her hair. She was firmly back in the province of the mind.

It did have its allures.



Dog-tired, muscles curdled, Zoya gave up trying to sleep. Her thoughts were of long ago; 250 years by one reckoning, 10,000 by another. No good to ask about real time. Time wasn't absolute, as physicists knew, but it was especially relative where Zoya was concerned. She turned on the lightbulb over her cot and sat up.

Middle of the night. Made it to the preserve. Graciously given a meal. Now she was wide-awake in her quarters, a square, stark room with a bare lightbulb—so like a military barracks. Overhead, the thud of someone moving on an upper level set the light swinging in a short arc. Back, forth, back.

So like a barracks.

The preserve, in its ugly functionality, kicked up an old memory. She couldn't blame the preserve; hadn't she kept the memory alive on purpose? Didn't she call forth the story, over and over for *Star Road*, why they had left? *We had to leave. But why, Ship Mother*? Then came the stories. Among them, the story of the barracks.

It was a plain wooden frame building with a long hall down the middle, and doors to rooms on either side. When the camp was freed, she had been there, had walked down the long corri-dor, looking in the rooms to left and right, through the little win-dows with their little bars. No faces peered through those windows, no skinny hands gripped the bars. The occupants were too small, being children.

In midnight sleeplessness it was a frequent walk. Even in the sustained dreams of stasis. They said you

didn't dream in stasis. That was a lie.

Tears clogged her throat. Some of those young ones couldn't be saved. Some of them refused to be saved. That was the hard-est thing to bear. When the prison doors were opened, some refused to leave. That was Zoya's definition of despair. She saw that same look on the crew's faces as they looked out on the al-tered earth. *Skinny hands gripping the bars, holding the door shut...* 

She paced the room, trying to leave the vision behind. This time we don't refuse. It's a fresh start. A new earth. From what the preserve inhabitants had said so far it was also an exceed-ingly *strange* earth. Not what we expected—but when have the Rom ever gotten what they expected?

At last she turned off the lightbulb and lay back down, see-ing the afterimage of the stark bulb, looking like a crystal world, lit from within.

Zoya regarded the plate of food before her. The platter held a fine approximation of sausage and hash browns, except that everything was an alarming shade of brownish green. The young man who'd brought her the breakfast smiled and ges-tured for her to eat. He was young to be missing so many teeth. His attire was drab and dirty, like her quarters—and like the rest of the preserve she had seen so far: a patchwork assem-blage of spare parts, a dreary, gadget-filled warren, festooned with cables carrying the circuitry of the habitat. The place stank. Vents exuded smells of cooked algae one moment, fol-lowed by a blast of fecal odors. No one seemed to notice but her. It was remarkable to think that this warren was all that re-mained of the once great city of Vancouver. But Ship assured her that below the preserve were the remains of that city.

She picked up her fork and spoon, connected together by a wire. Using the fork, she broke off a piece of the green mass, and chewed. It tasted like chicken feed. She smiled at him. "Good."

After her server left, she abandoned the food and unpacked her radio unit. It was past time to be in contact with the ship.

Star Road greeted her hail with relief and scolding. Where had she been? Why had she not reported in?

"I'm reporting now." They *would* begin with why the rules had been broken. "Bring Captain Razo, please," she said.

Anatolly's worried voice soon greeted her. With the captain was Janos Bertak, carping on her failure to report, hovering around Anatolly like a bad case of the flu.

"There was the storm, Janos. It disrupted our communica-tions. And we took great pains to avoid drawing the attention of the rats."

"Rats? There are rats?" Anatolly asked.

"Yes, indeed, rats. So something does live on the surface."

"What do they subsist on?"

Zoya hesitated to say *travelers*. No need to alarm Anatolly or give Janos fuel for intervention. "For one thing, they raid the agricultural patches. The preserves grow some food—an algae-based staple." She went on to fill in the details of her report, telling of the geography, the lights of the crystal stacks, and the surprising revival of the man presumed dead. Then she pro-ceeded to tell of her odd encounter with the dwellers there.

Last night, though she would have been glad of his support, Wolf had disappeared into the nether regions

of the place, leav-ing her among a group that seemed curious as to what she might be. They had offered her a simple hospitality of perfectly acceptable tea and perfectly awful pellets of green. She sus-pected that for the duration of her stay she would become all too familiar with the culinary repertoire of algae.

As she ate, she noted the ingenious mixture of wall and flooring materials: asymmetrical chunks and slabs of what might be plastic, asphalt, laminates—and even a large section of fine pink marble. Bonding it all together were thick seams of clear adhesive. Tubes and pipes twisted over the walls in tight arrays, affixed to the surface by more bonding agent. Zoya judged that glue was a critical resource in this habitat, literally holding the place together.

Her hosts waited for her to finish her meal, staring un-abashedly at her clothes and gear. But they were friendly enough, sitting on boxes and items of decrepit machinery, while according her the lone real chair among them.

As she and Anatolly had decided in advance, she didn't hide from them that she had come on a ship. The information was greeted with both open disbelief and fascination.

They called themselves Zeros, or so her lex said. They thought she might be an Eco. The terms gave her translator logic net no end of trouble.

She gathered that these preserve inhabitants were well aware that the earth had not always been as it was now and, in the time before—what they called the First World—it had been dominated by flora and fauna of all sorts. Was she an Eco?

Such a question was hard to answer, nor did she.

The next question was even harder to answer. How well, they asked, could she talk to Ice?

She paused as the room grew quiet. Did they speak to the land in animistic practices? She responded carefully. "We do not know Ice yet, as you do."

One of the women said that they would teach her to talk to Ice, if she had items to trade, and she was looking at the ear lex when she said so. And then her gaze shifted to Zoya's satchel. Zoya picked it up and placed it firmly on her lap, establishing her ownership in no uncertain terms. She had brought items to trade, but the ear lex and her radio would not be among them. They were less forthcoming after that, as though the most in-teresting thing about her was what she had to trade.

Wolf had said the preserve would want to trade with her, and had warned her to bargain hard, as he obviously planned to do with his sled-load of goods. His arrival created as much excitement as hers, for trade among the preserves was a rare opportunity. Mostly self-contained, the preserves lived off the city below, recycling, refining, and reconstituting. But from the looks of the place it was a meager, even squalid, existence.

Given this state of poverty, Zoya doubted that they could "talk to Ice" as the woman claimed. But it was clear that these people sitting around her believed that Ice—locally, and per-haps geographically—was full of information.

"So, Anatolly," she finished, "if I'm right, these people be-lieve they can communicate with Ice. And it with them."

"Ice?" he asked.

"Their name for it. Actually, it does look like ice. In places it has a translucent quality. And they speak of Ice as though it's a construct. One created by former inhabitants who have van-ished."

"Myth, perhaps," came Anatolly's voice.

She heard Janos in the background: "Stories."

"Yes," Zoya said. "It's a very good start."

Janos was mumbling something in the background. But Zoya went on: "Of course, there's another possibility."

The two men were silent.

"Ice may be an information structure. Nearby, anyway. They speak of it in those terms, although it may be driven by a belief system."

"Viad will love this," she heard Anatolly mutter.

"Think of it as a hypothesis, gentlemen."

"It may be more than that," Anatolly said glumly.

Her young man had come back, and was beckoning to her.

"They say I can meet with the leaders here today. They're called the Group of Five. I'll convey your compliments to them, Anatolly."

"Zoya," Anatolly said, "find out why they think they can talk to Ice. And be careful."

"Don't worry about me, Tolly. I'll be fine."

"And please don't call me Tolly."

She must remember that he was captain these days. How times had changed.

Gray, gray, and gray. The preserve was a drab place, despite its creative building materials. Great, barrel-sized ducts punctu-ated the corridor walls, disgorging tangles of cables and the bright soup of gases one was expected to breathe there. Zoya judged that the lighting of a match could ignite a firestorm.

Her escort—the young man who had served her breakfast—led the way down the patchwork halls, past bisecting corridors, and through a clattering region of machines that he described as the spinning room, if her ear lex told true. Out of one of the machines exuded a fibrous web of gray pulp, on its way to be-coming fiber.

From the stairs she had to descend, she realized the place might be as deep as it was wide. In places the stairwell ap-peared be carved directly from Ice, leaving behind cloudy, reg-ular planes, perhaps where Ice had been hewn along fracture lines.

Now she stood before the apparent leaders of the pre-serve—four men and a woman, the Group of Five. Seated at a table, they were dressed in an assortment of baggy trousers, tu-nics, and coveralls—all in gray—the common denominator color of their homespun industry. This group, like the preserve itself, revealed an odd mixture of squalor and gadgetry, includ-ing small devices clipped to their shirts as well as wrist circlets studded with lit buttons. Two of them wore headsets resting around their necks in temporary storage.

Zoya began with a smile. She noticed that no one was smil-ing back yet. Her hand went up to her

earlobe, counting her diamonds. They didn't know that was her nervous gesture. The four diamonds were always there, not that she needed her an-cestral wealth—as Ship Mother, all her needs were provided for—but it was tradition.

"I am Worley, of Ancou preserve," one of them began, the portly one, with fully three jowls under his chin. His temples were graying, which gave him a distinguished look, and since he began the formalities, she judged him the leader.

"We hold our positions by virtue of our leases on the five dig sites. We speak for Ancou as you do for your—ship. My as-sociates are Bolt, Gribbon, Martoff, and Eng. We are eager to hear who you are, and what our mutual enterprise can be."

She nodded. "My name is Zoyechka Kundara. My friends call me Zoya, as I hope you will. I speak for my ship, *Star Road*, as the representative of Captain Anatolly Razo. On behalf of my ship, I wish to thank you for your shelter and hospitality. It was cold up there, and I was very tired after my long journey."

Martoff leaned forward, peering through thick-lensed glasses. "Ah, your journey. We've been hearing about that. But a journey from where?"

"We have been on a journey between the stars," Zoya said. They waited for her to continue. "I'm afraid it's a rather long story."

Worley sat back in his chair, crumpling his chins together. "We have time for a long story."

She marched out the speech she had arranged with Anatolly. "We set out from here a very long time ago," she began. "On our ship, we lived out our lives and bore children. All that time we traveled across the great distances between this earth and the other earths God has seen fit to create. We explored. Then we returned to the place of our ancestors. It's much different than it used to be. But it's still a place we wish to call home, to establish a preserve of our own. We would welcome your sug-gestions on where we should build a home, for you know your world, and we have become strangers to it."

The group exchanged glances. Well, she was sure they found her claims extravagant.

"We might have a suggestion or two," Worley said. "Of course, you'd need a lot of help... a new dig on the barrens isn't easy."

Eng piped up, a slightly built man with an eager manner: "I could get some of my people to share tech on the food bender, how would that be?"

Whatever a food bender was, she was sure he meant well. "That would be..."

Worley interrupted. "That's one thing on the table. But we're a poor preserve, and much as we'd like to donate our expertise, there's a fair-trade issue, you see. Tit for tat?"

Zoya did see. He was pragmatic, of course. A man who lived in a place like this would be. "We're not looking for handouts," she assured him. "Trade should be fair."

Worley beamed. "Exactly. But let's not rush to do business. Time enough for all that, I hope." He folded his pudgy hands neatly in front of him. "We did have a few questions. Zoya," he added.

"You don't mind questions?" Eng asked. His smile was bnght and hard. He was afraid of her.

"Please, ask. I also have some questions, if it's permitted?"

"Certainly! This is the sort of thing we hoped for," Worley said. "But first—I can't help but ask—How long ago did you leave for your star journey?"

"Long ago," Zoya answered. When they waited for more, she added: "Thousands of years ago."

"Thousands..." whispered Bolt, the woman who had thus far been silent.

Zoya turned to her. "Yes. And for most of that time, we've been dreaming of returning home. We've missed it. Then, we found that it was changed."

"Changed?" Worley asked.

Zoya nodded. "Ice."

Bolt looked shaken. "If you left before the Advent of Ice, then that was long ago indeed." She glanced at her associates.

Worley said, "You are, you claim to be... of the time of the Ecosphere?"

"I don't know all your terms, but our ship set out when the earth was covered with open water and green hills."

The panel of inquisitors held a protracted silence.

"That is a weighty claim," Worley murmured.

A cavernous vent near the ceiling coughed into action, en-riching the air with smells of burning dust, chemicals, and sour milk. Though the draft made Zoya's eyes water, the Five were unmoved by the intrusion.

"If you say you are an Eco, show us your tech," Martoff said, his eyes looking as large as boiled eggs behind his framed glasses. He nodded at her ear lex, which had offered her whis-pered translations. Though her spoken language was improving, she still found translations helpful.

"It translates your speech for me. I've been studying your language, but I'm afraid I speak poorly."

"Not at all!" Eng inserted. "Quite remarkable. I congratu-late you."

For a moment the lights dimmed. The wall sconce behind the Group of Five's table fluttered on and off, finally blooming into full power again.

The Five paid no attention as Martoff continued doggedly. "We wish to know how it works. Your translator."

"I will explain what I can. But surely that can wait until we have gotten better acquainted?" She smiled broadly, but Martoff was not much one for smiles.

"Certainly," boomed Worley. "No hurry, none at all." He glanced at Martoff. "You must forgive our eagerness. But if you are from—that long ago—we are most certainly interested in how you built Ice. So much depends on it. Everything, in fact."

Zoya hastened to say, "Please understand that *Star Road* left home before such a thing as Ice came to be. That's why we were so surprised to find it here when we returned. I'm afraid we know very little about it. Less than you do."

Worley took a huge breath, causing his chin to double back on itself even more. "We had hoped otherwise. It could have been a partnership between us."

"Partnership? To what purpose?"

"Ice grows," he said. "But it never recedes. Makes our mining operations very difficult." He glanced at the floor. "There are riches to be had in the old city. But we fight for every square me-ter of it." He sighed. "You don't speak to Ice then? Not at all?"

"No. But you do?"

Worley spread his hands. "A paltry interface. We catch glimpses of Ice. A word or two, here and there. Of course, the foretellers say each word is precious. To those of a more practi-cal bent"—there he included his fellows—"we simply mine it for resources." He raised his hands, looking around him. "Everything you see here is from Ice. From the buried world."

"How does Ice... speak?"

Worley blinked. "Light. The light carries words. You didn't know?"

"We admit it caught us by surprise." The lights. The lights carried words. But whose?

The woman spoke again. "If you were born on your star ship, then you don't remember what it was like, do you? The time of things that grew on earth?"

Zoya had agreed with Anatolly that perhaps her unique his-tory would be too shocking, but she didn't want to lie, so she said, "We had our records of those days, and pictures, and they were beautiful indeed. You call those times the First World. But to us it was home."

The woman went on in a hushed voice: "It broke your heart? When you saw our world?"

Zoya was taken by surprise. Simply, she answered, "Yes." Then she added, "But we don't give up."

"We hoped you had knowledge of Ice," Worley said. "The Ecos created Ice. Therefore, they can uncreate it." An eager light came into his eyes. "Think of the riches lying buried, below."

"I'm so terribly sorry. But perhaps we can still find—a com-mon enterprise."

"Of course," Worley said, "A shared enterprise." He looked at the others, finding agreement there.

Zoya said, "I do have a few questions of my own, if I may." When Worley nodded, she went on, "You say the Ecos built Ice. To what purpose?"

"Well," Worley said, "that depends on who you ask."

"Some prefer a religious answer," Bolt said. "Ask the fore-tellers. But most of them are lunatics."

Martoff added, "Others say it is all a grand plan set in mo-tion long ago. From Ecosphere, to Zerosphere, to—the next sphere, when we will become one with knowledge."

• Eng leaned forward. "Most people understand things more practically. Though much of our history is lost, we do know the Ecos built Ice to contain all knowledge. But there was so much knowledge to contain—the Ecos knew so much—that Ice grew beyond bounds."

"Why did the civilization of the Ecos disappear?"

Eng continued: "They were unlucky. The Ecos fell on dark times and fled our world. That's why we thought you were the Ecos—returned."

Bolt said, "She should talk to Alger. He loves to study history."

Zoya brightened. "Alger?"

"Records," Worley said. "He keeps the records."

"Perhaps you would introduce me."

Worley waved a hand. "If you wish. But the man is obsessed with the past. We, however, are concerned with the future. Philosophy is all very well, but it doesn't feed or clothe us. You see?"

Zoya asked, "I'm told the nuns might be ones to discuss such—philosophy?"

The group in gray received this query with obvious dis-comfort.

She pressed on: "My ship captain has asked me to speak to them. Can I rely on you to arrange a meeting?" She adjusted the translator lex firmly behind her ear, with a gesture that she hoped conveyed *tit for tat*.

Again the lights faded. Noting Zoya's reaction, Worley said, "The storm yesterday. We're down at least nine thousand watt-hours as a result." He drew his mouth into a determined line. "As to the nuns, we'll try our best. The good sisters are busy, of course."

"Thank you. My captain will be most appreciative."

Worley heaved himself up from his chair.

"Before we adjourn," Zoya said, "I'd like to inquire after the condition of the wounded man we brought in on the sled."

Martoff snorted. "Man?"

"He's no concern of yours," Worley said. "The sisters will put him down."

She wondered if the idiom meant the same in their language as hers. Eng was giving her little shakes of his head. *Don't ask*, he seemed to convey.

"Will there be a... trial, a judgment made after fair in-quiry?"

Worley frowned. "They're not people, you realize." He cut off her response. "They *eat* people. Just like animals. See the difference?" In a more collegial tone, he said, "Now, if you want to share in the snow-witch price, we can discuss it. But, please, time enough for business later." He gestured to the door.

"The nuns will kill him?" she persisted.

"The nuns do what they will," Worley said, leading her to the door.

She rose, taking in the Group of Five, searching for any signs of concern. Some had donned their headsets. They had moved past the subject.

Worley gestured at her satchel. "You can leave that with your assistant." He waved in the young man

who apparently had been waiting for her outside. "He can take it into safe-keeping."

Zoya latched on to the satchel straps. "No, I couldn't ask him to do that. Among my people, we always cany our own baggage."

Especially if it seemed likely one's baggage would walk off and get ever so lost.



The records vault lay deep in a region of chemical-processing nodes, with air so laden with fumes that Zoya's throat hurt. Worley recited the outputs with pride: paraffin, benzene, chlo-rine, phenyl, ammonia, and amines. All the products were re-duced from mine salvage in a wonder of reverse synthesis. Her host rattled off the names of their machines with evident pride: coagulators, masticators, reducers, degassers, acetylators, and devices for hydrogenation and polymerization. Attached to each apparatus was a prominent electricity meter, measuring the draw on the solar reserves.

Just past the chemical plant, Worley stopped at a plain metal door that looked in rather better condition than most she'd seen. It was the records vault. Entering, Zoya passed into a realm of scrubbed tidiness. Meticulous order reigned, along with soul-lifting fresh air.

There, on long, spotless tables, a few book remnants were laid out like sacred relics. Gloved workers bent over the tables, exam-ining the records with what looked like magnifying devices.

"Don't touch!" Alger, the chief of records, was at least sev-enty years old, and though in a wheelchair, he was clearly in charge of his domain. On his thin body, his head appeared large, augmented by thick gray hair like an outer shell on a sphere.

"These are fragile artifacts, not for touching," he rasped at her.

Zoya withdrew her hand.

Worley intervened: "That is no way to speak to our honored guest, Alger."

The things Worley could say with a straight face. Zoya knew he was distressed by her presence among them, and commo-tion was growing. To maintain order, he'd moved her to a more isolated room. But he was stalling.

Alger powered his chair around to glare at Worley. "That book is nine thousand years old, and worth more than the en-tire Worley dig, with its effluvia of knickknacks." He stared Worley down. "You lift a book like that, it disintegrates."

"I'm so sorry," Zoya hastened to say. "I'll keep my hands to myself, I promise."

Alger held Worley's gaze another moment, then swung around to look up at Zoya. "See that you do." He had started to show them his operations, and now proceeded, though he kept a skeptical eye on Zoya.

Gesturing for one of his assistants to stand away from his worktable, Alger approached the workstation. A small sliver of paper lay on a tray amid several miniature brushes and flasks containing liquids.

"We have to coat them, once we separate the pages," Alger explained. "Not much can be salvaged, because the pages ad-here to each other. When we rescue a fragment, we coat it with a preservative."

When Zoya bent closer, she saw that the fragment was in the old tongue, Ship's English, which she had decided to call Late English. All that was left of this record was,"... as weath-erization, appliance

efficiency and rebates..." To her surprise, Alger read it out loud, with a heavy accent, but accurately.

Noting her expression, he said, "If I couldn't read the old language, what good would the records do us?" He waved at his assistants. "They all can read it, or they wouldn't be here. They'd be down at the digs trying to scrabble a living in the junk industry."

Worley drew himself up, as much as his stocky frame al-lowed. "That junk keeps us alive, Alger. It's nothing to sneer at."

"Oh, it's plenty to sneer at." He rolled onward, his chair bris-tling with tech that easily allowed him to navigate the aisles and make notes in his arm pad, which he did, as his roving eye noted things they passed. In some respects the motor chair seemed needlessly complicated, as though mechanical appli-ances might be valued for their own sake. Yet despite the pre-serve's flair for mechanics, the effect was still that of jury-rigged salvage.

Zoya started to follow Alger, but Worley held her back a moment, commenting in an undertone, "We indulge him"—he waved at the room and its contents—"but what good is all this? Can't touch it, can't taste it, can't spend it. It's a waste of resources." He winked at Zoya, as though she shared his as-sessment.

Alger turned around his chair, waiting for them to catch up.

"I haven't got all day. We're busy here, as I believe you can see for yourselves."

Zoya caught up with Alger. "Please continue. You're very kind."

"Kind has nothing to do with it." He fixed her with a cool gaze. "This is a courtesy to a fellow student of science." He nodded. "Oh, I've heard all about you, Zoya Kundara, enough to know you're not one of the rabble. Came on a star ship, did you? Good, good. We'll exchange information, then." He craned his neck to get a peering at her ear lex. "Like to take a look at that speech device of yours, sometime." Then he looked down the aisle, where Worley was bending rather too close to a book fragment. "Don't waste your time with that man and his ilk. He's a *politician*," saying that last word in a tone of voice that left little doubt of his opinion of public servants.

"Alger, are your entire records stored here in this room?" Zoya asked. She hoped this was not the extent of their collection. "Where are your electronically stored records?"

"From the First World?" Alger shook his head. "All gone. Pfft."

"Pfft?" Zoya repeated.

"Yes, ruined, useless. All of it." He sniffed. "So you don't know about that part." He powered closer to her. "A good plan gone bad," he said.

"What was a good plan?"

"Ice." He glanced down the aisle where Worley was still en-gaged with one of his assistants. "It's not a welcome theory. Contradicts the rabble's beliefs about Ice watching over them. These people aren't scientific, they're feeble-minded occultists with a penchant for gadgets."

She gently steered him back. "The plan?"

"Yes, it was a plan! Do you think something like Ice happens by accident? Spontaneous generation?"

"Created by a previous civilization, is that what your re-search shows?"

"The Ecos built it, everyone knows that."

"To contain information..."

Alger nodded. She'd been holding that concept at bay. It had been theory and superstition, and it still might be. But myths always contained their own truths.

Alger was saying, "What happened to the Ecos, everyone wonders. I'll tell you. They're dead. All dead. Ice killed them, just as it's killed everything that once lived here. We're all that's left. We're the Ecos. But we're Zeros, all right. Ignorant, pawing in the garbage dumps of history."

"And what was the Ecos' plan?"

"To save us, you damn fool. Aren't you listening? It was all created to defend us, and ended up doing the opposite. Now, we think—those of us who bother with thinking—that it was dark matter." He cocked his head. "You know what *that* is?"

Zoya was beginning to feel like a schoolchild who hadn't done her homework. "I have a general idea..."

"Ideas aren't general, they're specific, or what good are they?" He went on, "Our records show that the Ecos always thought there was something out there"—he glanced upward. "Something that could account for certain measurements that didn't make sense. So long as it was just a theory, who cared?" He glanced at Worley as though he were an example of one who cared little for theories. "Then we encountered it in an un-pleasant manner. The dark days. Dark days indeed."

"What happened?"

"Pfft." Alger nodded his head like a giant flower gone to pollen. "Gone. Destroyed." He waited for her to catch on. Then he gave up. "Biological systems went down. Plant life died. Then people died. The Collapse. No records, of course, except notes on paper." He looked around the lab with its relics of pa-per. "Opposites, that's the gist of it. The dark cloud was deeply negative as to information. It attracted information to itself, at our expense." He flashed her a warning look. "Don't ask me how. I don't know how. We're always looking in the records for the mechanism of how it worked. Haven't figured it out yet. But we will. The point is, it came and went—the threat passed by, eventually. But Ice stayed."

He nodded. "You might ask, why did Ice keep growing? That, my friend, is the big question. Would the Ecos have been so foolish to create a defense that would ruin the very earth it was designed to protect? No, not intentionally. It was never meant to grow so large. Something went wrong."

"Nonsense." Worley had returned to stand beside them. "How could the Ecos commit such a blunder?" He shook his head. "Alger gets carried away sometimes."

"Carried away by the evidence!" Alger shot back.

"It's a theory, Alger," Worley said, with his habit of gentle reasonableness. It grated on Zoya. "Not a bad one, but it doesn't go well with the folks here." He looked at Zoya, shrug-ging. "Simple folk need their religion. They hold Ice in awe. Doesn't do to call it a mistake."

"No. Doesn't do to speak the truth."

Zoya slipped between them. "Alger, I was hoping that you might demonstrate an interface with Ice."

Alger gave her a withering glance. "Interface? I leave that to the cranks. Don't waste your time. Whole thing's en-crypted. A waste of time, unless you're keen on fortune-telling."

Encrypted, Zoya thought. She imagined a closed, bolted door. But it was a door.

Worley shook his head, "Foretellers have their place, Alger. Live and let live."

"Politician" Alger muttered as he turned his chair and cruised away down the aisle.

Worley watched him go. "May we go on, Zoya? I did hope to show you the digs and the metal-reduction plant. We're proud of them, even if our master of dust isn't."

She allowed herself to be led from the room, with its ancient texts, the fragments of phone books, old novels, repair manu-als. A hopeless labor. She followed Worley to the mines, think-ing of the most important question Alger was pursuing: Why did Ice keep growing? The answer might lie in the records.

But Zoya was looking elsewhere, to intention.

## **CHAPTER SIX**

—1—

Anatolly could see his breath in front of him in this region of Ship, minimally heated to conserve energy. Most crew found these decks lonely and depressing, a sign of failure. The Rom's reduced numbers. But for a man who seldom had privacy, Anatolly liked to stroll in them.

He found himself drawn to deck five and the stasis cham-bers, where the seeds and eggs were kept. He traced his hand along the wells, and the names lit up as he did so: Biston *betularia*, *Podicepts cristatus*, *Foraminijera*. Fascinating words, splendid creatures. In English they sounded more mundane: peppered moth, crested grebe, sea spider. His fingers trailed the plaques of names, and the litany of creatures instructed him of his purpose.

Someday soon they would incubate the organisms. Having saved these life-forms from extinction, *Star Road* could be re-garded as the new ark, not to put too religious a stamp on it. It gave him some peace to consider such a high mission. Perhaps the Rom would fail to thrive on earth. But before they perished, they would set those seeds into the world. Jozsef Mirran had al-ready arrived in the Sahel. Anatolly insisted on calling it the Sahel, not the last lands, as some of the crew were calling it. Too negative. True enough, the land was bare, though it re-ceived more rainfall than in an earlier age.

As planned, Mirran had landed on the eastern coast, near the hundred-meter-thick shelf of the advancing stratam, where they could watch its rapid growth as well as study the soils. It felt like progress. It was progress.

A noise behind him.

"Captain." Janos Bertak stood at the door. "I thought you might be here."

His solitude was at an end.

Janos glanced at the stasis wells. "Time for them to wake up."

Anatolly nodded. "Good thing we saved them." Once they knew they were returning to the green earth, the crew had ar-gued for abandoning the stasis units to save energy. Of course the human embryos would have been the exception...

Anatolly asked, "Any word on Zoya's notion of dark mat-ter?" Dark matter, the Zeros said, had killed life on the surface.

"Vlad has set up a special team on it."

Dark matter, Anatolly mused, was the impetus for Ice, now a scourge in itself. But it began with dark matter, so the Zeros said. Or rather it ended with dark matter, the end of civiliza-tion. During their long journey on Ship, everyone wondered, when they had no word from earth, if those they'd left behind had succumbed to the Rampage after all. *Rampage* was a strong word. Perhaps they should have saved it for the real thing.

The captain pressed another data well, the one with the gold plaque: *Homo sapiens*. "I don't care for the term—*dark* matter."

"Sometimes it's called strange matter."

Anatolly snorted. Even worse.

"I'll walk up with you," Janos said. "So we can talk."

They exited the stasis room and turned into the abandoned main corridor. Anatolly saw that Janos had something on his mind. People usually did, when seeking out the captain. "Well, Janos, what is it?"

"It's the crew, sir." The overhead lights shone off the sweat on the lieutenant's high forehead. "They need something more proactive than Mirran's research operation."

"What's more proactive than discovering what we face?" He hadn't meant to sound so defensive. "Come, Janos, out with it."

The first mate nodded. "Sir, we need a colony, not a science post. A place for the crew to make a home. Some of the crew don't like being parked up here. Passive."

That galled. Just when Anatolly had taken action, he was judged passive. Well, he'd asked for advice and he was damn well getting it.

Janos continued: "The women, sir." A small gesture toward the deck above, meant to take in the entire ship and its crew with whom Janos had close interactions, to keep the pulse of the ship. When Janos talked about *the women*, the captain lis-tened.

"What about them?"

The first mate pressed his lips together, drawing down his mustache into a hard line. "Some of them think they need to be groundside."

At the captain's questioning look, Janos went on: "Some of the younger ones think that the sooner they leave the ship, the sooner they reduce their radiation exposure." He coughed. "For the sake of bearing children."

Anatolly sighed. Ah, for bearing children. Of course they were eager to begin a colony, but radiation damage wasn't worsened by just a few more days. It was a question of years, of decades of exposure.

"The crew has need of a success," Janos continued. He noted his captain's expression, but pressed on. "Something to gladden their hearts. Without a strong role, they mutter and complain. You know how the crew is."

Was that irony in his first mate's tone? Damn impertinent if it was... but he cut Janos Bertak some slack. A valuable offi-cer, and friend enough to give him a true opinion.

"Let me take a shuttle," Janos persisted, "and begin building a home base. Some of the women would be sure to volunteer. Tereza, for one."

Anatolly knew how Tereza suffered, and how Janos must wish to gladden her. But it wasn't the time. "We can't just barge in with a settlement—before we have good relations with the preserves. Zoya's mission first, Janos. Then the home base."

A tongue punched into Janos's cheek. "Zoya wasn't the one to be sent on that mission. She's already made a bad impression on the nuns."

Ah, that business with Sister... what was her name... A sharp exchange, as Zoya reported it, but surely not damaging...

They passed the former lounge, with its view screens dead, seats empty. Quarters like that were a sobering reminder of for-mer days. Anatolly's hopeful mood had deserted him.

"Think about it, Captain," Janos said—as though Anatolly hadn't thought about any of this before—"the colony under way, the women recovering, families started..."

"Christ's blood, Janos, we don't know the dangers! Some-thing killed off things down there, and it wasn't Ice. And we don't know what the preserves mean by dark matter, what it is, why it's dangerous."

"Was dangerous. The inhabitants of the preserves are healthy enough."

"They live under a slab of Ice that could offer shielding from whatever killed things off."

"This sled-driver, Wolf, seems healthy enough."

"Leave it be, Lieutenant." He locked gazes with Janos. "I've heard enough."

They stood before the elevator, and Janos punched in the flight deck. Anatolly sucked in a deep breath, cold and dulling. Janos was under pressure from Tereza, he could figure out that much. The lift sped to the occupied decks.

But Janos was right about one thing: Hearts were broken, despair floated in Ship's corridors like a bad wind. And it wasn't true that they had unlimited amounts of time. Even set-ting aside the childbearing issue, there was the spread of Ice to contend with. Mirran's crew said the soils still teemed with mi-crobial life. But at the rate Ice was growing, they lost precious meters of land every day.

"Janos, you have some good ideas. But there's no rush for our colony. We have Zoya, we have Lieutenant Mirran at the re-search base. We'll proceed in increments. There's this whole matter of Ice's—-function—for one thing. We can't settle on it or near it until we know what it is. What it might do ."

The door to the flight deck whisked open. "While we *do* nothing," Janos grumbled. At his captain's sharp glance he amended that to, "Aye, Captain."

Anatolly led the way onto the flight deck, not liking the tone of that Aye, Captain.

For the first time it occurred to him that Janos might chal-lenge him for office. The man was competent, ambitious. The right age. But no, in two or three years, and once the crisis was past, Anatolly would step

down of his own accord. Surely Janos could wait for his chance.

Ship's captain was elective. Any officer could call an election. Of course to do so and lose was a career-killer, if the captain held grudges. Anatolly's own election to office was an orderly transition. Vitrovic was disabled with a stroke, and Anatolly won the election—not by much, it was true, with three others vying and splitting the vote, damn them. It hadn't been a man-date, by any means, and it left Anatolly scrambling ever after, wooing the losers—wooing everybody, it sometimes seemed.

He glanced at Janos, who was just settling into his station. It looked as though the seat no longer fit.

Anatolly turned to the officer of the watch. "I have the bridge, Lieutenant Andropolous."

And he sincerely hoped he did.

Kellian Bourassa hurried down the corridor. Behind her, obo3 strove to keep up, its high-pitched whine announcing its path-way. Those who'd run into obo3 before stood quickly out of the way.

The sisters were packing—suddenly they were in a great hurry to leave—and she hadn't yet said good-bye to her friend Jamila, nor even told her she was going. Where was Jamila? She had posted a tronic message, but received no response. The shrine was the last place she hadn't looked.

As Kellian slammed around the corner into the hall of the shrine, she stopped short, seeing the crowd massed there. Though it was the middle of the work shift, she saw a hundred people at least. From the pile of offerings, many more had been there recently. The heap of salvage—offerings—came nearly to the windows of the shrine. Something had ignited a bit of su-perstitious fervor. Out of long practice, Kellian scanned the pile of hardware, looking for useful items.

Then she spied Jamila, and threaded through the crowd to her side.

Jamila hugged her, whispering, "She's just down the way in the records vaults."

Someone jostled Kellian, and she called obo3 closer to guard it. "What are you talking about? Who?"

A voice behind them boomed, "Back, all of you!"

"Oh, he would come meddling!" Jamila snorted. It was a foreteller, dressed in his best robes, tastelessly colorful. "This is not the time!" he bellowed. "If she knew anything, the Five would have told us so!"

"The Five," Jamila said under her breath, "don't *believe*." Her face softened. "Kellian, what if it's true?"

Kellian grasped Jamila's wrists to make her pay attention. "If what is true? Just tell me."

"The star woman," Jamila said. "What if she's an Eco? They've come from a star journey, and they left during the First World. Worley says she's not an Eco, that she knows nothing, but what if he's lying?"

"Star woman?"

"If you would just pay attention to something besides that." She inclined her head toward the obo. "Yesterday a trader brought in a woman. She's come on a ship—from a star voy-age." She searched Kellian's eyes for some sign of understand-ing. "You see what that means?"

Kellian finally did, all too clearly. That was the reason peo-ple were gathered at the shrine—hoping for favor from Ice, now that its godlike creators had returned. She tried to absorb the implications of what she was hearing. A ship... Wherever the star ship had come from, it must have undreamed-of knowledge and tech. If there was a ship.

"How do we know she isn't telling a tale?"

Jamila rolled her eyes. "Because of the ear thingy! It trans-lates our speech and whispers to her. Nobody's seen anything like it. And up there"—she pointed upward—"is a ship. That much even the Five admit." Jamila turned toward the shrine with its ancient controls—controls she believed once commu-nicated with Ice. "If it's true," Jamila said, "then the time of the next world is here, Kellian."

Kellian looked over the heads of the worshipers. She stood taller than most people, and many were kneeling and muttering their prayers. So this, she thought, is what greets the starfarer: pathetic superstition. The will of Ice revealed. Instead of divina-tion, Ice would speak directly to its worshipers. She wouldn't miss much about this place.

Jamila went on, "The nuns are giving out a disbursement of algabeans as a general commendation that a snow witch has been delivered to them. So we will eat well for a week!"

"Who found a snow witch?"

"The trader, Wolf, the one who scavenges. He captured a live one."

Snow witches. Poor, desperate mutations. Mad, all of them. Jamila believed they were punished by Ice for impiety. The longer she stood there, the more Kellian saw her preserve through the eyes of a stranger. She was embarrassed to be one of them.

"Jamila, I'm leaving."

Jamila cocked her head, and Kellian added, "I'm leaving with the sisters." She nodded. "They accepted me."

Her friend's smile of surprise bloomed, then faded. "When?"

"Right away. I came to say good-bye."

The foreteller was exhorting the crowd to break up. He looked worried, as well he might be. Who would turn to him for guidance once the Ecos were here? He was a charlatan and deserved what was coming. Whatever God was, he was not a climate-controlled room housing ancient machines. Her family had kept their old faith. God was a mystery, greater than hu-man knowledge. Greater than Ice knowledge.

She said her good-byes to Jamila and, snatching up obo3, began a dash to the records vault, both confused and excited. She was like every other pitiful dweller there, eager to see the star woman, but with nothing to offer this visitor, nothing to distinguish herself. She wanted to say, we aren't all ignorant. I'm not like them. Not that such a personage would pay attention.

Reaching the records vault, she saw a crowd trying to catch a glimpse of the star woman. And there she was, standing with Worley, who was waving for the crowd to disperse. Worley had worked himself up into a bright pink fit. It would almost be worth sticking around to see what power shifts would ensue from the arrival of the star ship.

Kellian pushed through the mass of people, using her obo to cut a path. The woman from the stars was olive-complected, with a black mass of hair clasped at the back of her neck. White gems glittered in one ear. Perhaps that was the language translator. She had made up her mind what she would do. She held obo3 out to the woman.

"Take this for a gift, I beg you," Kellian said. "This obo is my best creation. I'm teaching it to think."

"Off you go," Worley bellowed, his face purpling. "Go!"

But Kellian sidled past him. "I am Kellian Bourassa. We aren't all ignorant."

The star woman reached out her hands to accept obo3, but Worley stepped forward, swiping his hand against the obo, jar-ring it from Kellian's hands. Even as Kellian lunged to catch it, the obo slammed into the floor with a sickening crunch.

"No..." Kellian moaned.

Then Worley gave the obo a savage kick, sending several mechanical arms skittering across the corridor. As Kellian tried to fend him off, he pushed her in the shoulder, thrusting her away. The star woman had grabbed hold of his arm. Shaking her off, he brought his great thigh up in the air and smashed his foot down on obo3, denting the middle of the unit's central housing.

Worley turned back to marshal the crowd, barking at people to leave. Some retreated, but Kellian held her ground, stunned. Obo3 lay shattered at her feet. Eighteen months of labor and care, shattered under the heels of a moron.

"My creation," Kellian murmured. "My best."

The star woman fixed Worley with a calm but damning stare. "My ship will accept gifts," she told him. "If they dimin-ish your holdings, we'll pay you." He had the grace to look un-comfortable, if not apologetic. "I'm not pleased, Worley."

He winced. Kellian saw how her quiet manner was more ominous than Worley's pink rage. She would remember that lesson.

The woman put a hand on Kellian's shoulder. "I'm sorry for this," she said. She seemed to move her lips first, and receive a translation from what Kellian now saw as a small device behind her ear. "You must rebuild, of course."

"I'll be with the nuns, ma'am." Suddenly the prospect seemed less desirable.

The star woman looked worried. "Go with God, then," she said.

Worley bundled the woman off, and the crowd surged to follow.

Kellian looked down on the ruin of obo3. The star woman's words wove into her thoughts. *You must rebuild, oj course*.

Of course.



Anatolly tried not to keep a brooding watch on the planet, but there he was, on the bridge, and once more staring at the view screen.

He sometimes had a strange visual impression of the globe—all in his imagination—as though he could see beneath the mantle to the shapes of the continents and the shorelines he had studied all his life. By its very blankness, the view sought definition, and his mind supplied it: the boot of Italy, the Strait of Gibraltar, the Red Sea, the wedge of India...

fabled names and places—but more real to him than this un-natural, fractured pearl.

Yet Ice was a more ambiguous presence than it had been. They had been assuming that Ice ruined earth—and indeed it had, but not, according to Zoya, before a different ruin bled off life from the world. *A good plan gone bad. A* compound tragedy. First the great death from the field of dark matter. Then Ice to lock death in place...

Janos was by his side all of a sudden. "Incoming message, Captain."

Zoya or Jozsef Mirran, then. But Janos was already shaking his head. "It's the nuns, actually." They exchanged looks.

Transferring command of the bridge to Lieutenant An-dropolous, Anatolly had the radio link put through to his briefing room, just off the bridge. He had thought to let Zoya make the first contact, but here the nuns were taking the ini-tiative. As Janos Bertak stood by his side, Anatolly opened his channel.

"Captain Anatolly Razo speaking, of the Independent Vessel Star Road."

The voice came with some interference and time lag, but it was a woman. "Thank you for accepting this call, Captain. I am Mother Superior Solange Arnaud of the Sisters oj Clarity."

Anatollys left eyebrow went up. Janos's whole forehead rose. *Sisters oj Clarity* was no holy order he'd ever heard of.

"I am calling to welcome you on your return from your jar journey."

Anatolly wrote on his stylus, *Solange Arnaud*. "Thank you indeed, Reverend Mother. We are glad of your kind words. Al-though we are surprised to have such a communication."

"Surprised? We do mean our welcome most sincerely."

"Yes, appreciated. But we've been in orbit already for eleven days..."

A cascading laugh. "Time moves more slowly for us, Captain. Please overlook our backward manners."

Ana tolly found himself smiling and looking up at Janos. That was clever, that business of *time moves more slowly for us*— in terms of relativistic effects, that was clever. Janos caught it too, smirking.

"No need to overlook anything, Reverend Mother. We are delighted to hear from you. We are strangers here, though we have ties, of course. Ties of ancestry, ties of the heart."

"Ties *that bind*," she replied, and Anatolly wondered at that reference to the old Protestant hymn, and thought, here was a nun with a broad sense of humor indeed.

"Of course," she continued, "I understand."

An awkward pause. He wasn't sure what it was she thought she understood. Nevertheless, he said, "My representative, Zoya Kundara, seeks an audience with you, Reverend Mother. A face-to-face meeting. I hope you will welcome her."

"We'll do our best. But nothing can replace a cordial understand-ing between leaders. The personal touch, don't you agree, Captain?"

"Yes, of course."

A fuzzy background static surged for a moment, and he had time to wonder where she called from, and

then wrote on his stylus, pushing it over to Janos: *Trace where the signal* is *coming from*. Janos nodded, leaving the room.

"Captain Razo," came her voice again.

"Yes? I'm here."

"Captain Razo, there is so much to say between us. Where to begin?"

"An excellent beginning has already been made, Reverend Mother. We have begun."

"Certainly. But now we must go back a long way to begin. You will want to know us, and we you."

"We go back rather longer than you may imagine."

"The Sisters of Clarity have very long memories. But it may be that where you are concerned, memory jails us." There was a loud buzz of interference. "Can you hear me?"

"Yes, coming through now, we can hear you."

"Our radio equipment is not as fine as yours, lfear. But we will make do, shall we not, Captain?"

"Continue, please, Reverend Mother."

Janos came back in, moving to Anatolly's side and hitting a key on the comm node. A screen display read, *latitude* 47AO n, *lonfftude* 122.07 w. with a map of the western hemisphere zooming in to a flat swath between two mountain ranges. A yellow arrow showed Mother Superiors location, two hundred kilometers south of the original shuttle landing site. It seemed their decision to land near the heaviest radio transmissions had taken them close to the enigmatic nuns. The whole area that had once been the megalopolis of Puget Sound was still heavily populated, by current standards. There were radio transmis-sions from at least six preserves... one of which now proved to be an outpost of this religious order.

The nun's voice came again: "Captain, you do not know us. 1 fear you have a rather bad shock coming."

"We can see the world, Reverend Mother. It is a shock in-deed, and weighs heavily on our spirits."

"It is of the spirit that I mean to speak, Captain."

Anatolly exchanged glances with Janos. He gestured for him to pull up a chair. If this was to be a religious lecture, they had better get comfortable. Janos sat at Anatolly's elbow, as Mother Superior continued:

"I do not know how long it is since you left us. Can you tell me how long?"

"It has been ten thousand years. For you. Less than that for us."

"Ah." After a pause, she said, "Then you will not know how we

have evolved from what you knew. Tell me, Captain, are you reli-gious?"

A glance at Janos, who shrugged, as baffled as his captain.

"Mother Superior, we are a very Catholic ship, I assure you. We have been out of the bounds of the Holy See, but we have our priest, and we've kept the sacraments in the manner possible."

"I see." More hissing and buzzing. Their orbit was taking them away from ideal transmissions. "You should know, Captain, that we—the Sisters of Clarity—are no longer a people of faith. We are a contemplative society, but not based on faith. I'm sorry to disappoint you, but you must accept us —if you do so at all—as we are."

Consternation filled Anatolly. What was this? Not people of faith? Sisters of Clarity... not of the Church?

"The Church" she said, as though reading his mind, "no longer exists. Perhaps that is all for the best."

After a long exhalation, Anatolly murmured, "We have a dif-ferent viewpoint, naturally."

"You haven't had as long as we to achieve clarity."

Was the woman presuming to lecture him on religion? She was bold, this one.

Solange continued. "We found that as religion dropped away from us it became easier to find clarity on the human condition, to examine the moral life, without reference to... dogma."

Anatolly just thanked God that he had not invited the *priest* in on this discussion. The whole concept of Ice Nuns was blas-phemous from several angles. But that was a separate issue for now.

Anatolly responded, "I have always believed it best to be honest, and to proceed from there. Thank you for telling me."

"And now, Captain, you."

That was a quick transition. She was done with her story, and now wanted his. Fair enough.

Janos made a slow shake of his head, mouthing, be careful.

He sighed, gathering his wits. "Mother Superior... shall I call you that? Or is there a term..."

"Please, if you wouldn't mind. Mother Superior will do. It pre-serves the forms."

Damn, that he had even asked. What right had she to *pre-serve the forms*? He shouldn't have asked, should have called her madam president, or, or... but for the sake of courtesy, he was rather stuck.

"Well then... as to our story..."

Janos scrawled a note and pushed it in front of him: How does she speak our language?

An excellent question, given Zoya's heroic efforts in trans-lation.

"First, if I may, I wonder how you speak the same dialect as we do—after all this time."

Again that musical laugh. "Captain, we don't. Not usually. It's just that we maintain the old tongue among ourselves, since the ma-jority of our research texts are in that language. And we also speak the ancient Latin. Our inquiries are vast and deep."

"Thank you, we did wonder."

"We?"

"Ah, yes. Pardon me. My first mate, Lieutenant Janos Bertak, is at my side."

"Delighted to meet you, Lieutenant."

Janos spread his hands, letting Anatolly handle it.

"My first mate extends his warm wishes," Anatolly said.

Her silence indicated it was his turn to speak. Once again, he mustered his story. He decided to emphasize his crew's *hu-man condition*, their suffering and courage. It was a good story, and a true one. He thought it would appeal to her.

"We left in the time of the Rampage," he began. "You know of those times, Sister?"

"Yes, Captain, that period of history extended for almost two hundred years, so the ancient texts say. The world survived that epi-demic, but many died."

"It was tragic indeed. We kept contact with earth for many years, and knew that they found a cure eventually. But it was only a temporary reprieve from disaster, I understand. The fi-nal blow came to civilization some years later. Is that correct?"

"Armageddon. Some called it the Collapse."

He exchanged confused looks with Anatolly. "Armageddon? But you aren't..."

"Religious? No. We use some of the old words. Redefined for our purposes."

The *redefinitions* were worse than her atheism.

She went on, "But from ruin came rebirth. The Advent."

"Advent?"

"Of Ice. We seek its knowledge. As you should. But please, Cap-tain. Your story."

"As to why we left, our people were unfairly held responsi-ble for the epidemic by some. The People of the Road, we call ourselves, the Rom. You may know us as gypsies."

"Yes," was all she said.

"We were immune to the virus, and hated for it. Gypsies have ever been suspect, because we had no fixed borders, no nation. We go from place to place, or we have done so when the spirit moved us. They studied our DNA for clues to our im-munity, but to no avail. Some took us by force for intermar-riage, hoping to confer immunity on the children. Others simply slaughtered us. It was genocide, eventually. When the truth became known, and the courts had their day, they asked us who would represent us, because we had no unified voice. We—our ancestors—chose a person. She was esteemed and learned, and had risen high in academic circles. A linguist and sociologist. A Hungarian gypsy. This woman made her impas-sioned pleas on our behalf, and when they would have exe-cuted the criminals—but only a few were brought to justice, mind you—she offered a compromise to stop the killing, to stop the endless round of murders and revenge.

"The People of the Road would accept sovereignty over the great generation ship that was then nearing completion under the management of the World Federated Industrial Program. It was meant to be a research ship, but we took it in payment. We would leave the earth, taking our problematic DNA with us—and our wandering ways, if you will. Not everyone chose to leave. For some it was too drastic. But

many of the Rom were eager to leave. We had very bad memories, and we could never forgive. Each indicted country paid reparations to the WFIP, and after years of haggling, the ship was ours. And we left."

"I see." Static and buzzing. "Soyou are that ship."

Yes, we're back, he thought. And perhaps you wish we weren't.

"And why did you decide to return?"

"We had to. Mother Superior, we have suffered on this jour-ney. In the end, it was a journey that nearly finished us. Our people, to their great sorrow, can no longer successfully bear children, and our numbers are greatly reduced. We had hoped that by returning to earth, we could return to normalcy. To that end we will establish a colony. I trust we can count on your support."

"Of course, Captain. Count on me, absolutely."

"We would also have an interest in sharing your research into the problem of Ice."

"The *problem ofleeT*"

"Yes. Its capture of the land. Its growth rate."

"It alarms you," she said.

"Mother Superior, you may not be aware that Ice is aggres-sively spreading. Soon you may not have any free land left."

"Those lands are dead in any case."

"They might be saved." Anatolly glanced at Janos. His first mate's forehead was a pile of wrinkles, as he, like his captain, tried to fathom the woman.

"The land," Solange was saying, "does not need saving, Cap-tain. People do. That is the great promise of Ice."

Buzzing and hissing increased. Their conversation could not last long, and there was so much left to discuss.

Her voice fought through the static: "With all your high tech-nology, Captain, do you mean to say you haven't seen past the sur-face—to the information?"

"No. Not yet, but we have every reason to be optimistic about what we can learn. In that regard I'm sending my repre-sentative to speak with you. Zoya Kundara is most eager to talk in person."

In the fizzing coming from the speaker, only shreds of the sister's words came through."... sled... Zoya ..."

"What's that? Losing you, Mother Superior."

"... sorry... hear."

"Thank you, Mother Superior. I hope we may speak again soon?"

But all that came from the speaker was static.

After a long pause, Anatolly turned to Janos. "That woman has some strange ideas."

Janos was lost in thought. "This is her world now," he mur-mured. "We are the strangers."

Anatolly frowned. That might be true on some level. He didn't like hearing it from his own first officer, though.

## **CHAPTER SEVEN**



Swan gathered his thoughts. He concentrated on the subvocal commands, enunciating the commands in real language in his mind. It sped down his skin, dumping out of his hand when he pressed against Ice:

This entity does not execute well.

Descriptors: constant hunger, absence of sense of smell

Scan stack, identify error

Execute

Ice flashed under his hand, responding in an instant.

This entity, Lucian On, executes well.

Descriptors: goal of satisfying hunger achieved through ingesting

food: sense of smell does not process well; working to achieve

goal of smell; running program Go

Swan felt a prickle of annoyance. He should know if he was functioning well. And he damn well was not. Though he was stronger, heartier, he was always hungry. Then when he ate, food was tasteless, because he couldn't smell. While it was a minor symptom, it might indicate a larger problem. However, he must try not to worry about every small malfunction of his renewed body. He'd only been awake a few days. He framed his subvocal response to Ice:

Overwrite referent: Lucian Orr; substitute: Swan Execute

Done Go

Swan continued:

Ingestingfood achieves goals poorly

**Analyze** 

Execute

Acknowledge Running program Go

His stomach went sour. Ice acknowledged there was a prob-lem. Given Ice's—size—what could possibly be a problem? Ice was superbly suited to attack and subdue biological-systems is-sues, with their complex variables. It had virtually limitless cal-culating power and the luxury of ten thousand years to work on programmed goals. Yet it seemed... stuck. Why? With-drawing his hand from its clasp on

Ice, Swan looked at his tender, pinkish palm. Beneath the surface of the skin, the nanosculpted receptors were invisible to his unaided eyes, but nevertheless, he was infused with interface. The interface that Solange Arnaud and the good sisters labored to find was not to be found in hardware, but in wetware. Someday he would share the process with a select few. For company, after all. No one wanted to live forever alone.

But let Solange prove herself on this plane first. In the mat-ter of the ship. The ship that even at that very moment was at-tempting to break the source code. They would find all doors locked. But, standing behind the door, Swan was uneasy.

The universe had generated a random event: the arrival of a ship where, in ten thousand years, no new thing had hap-pened. A random event, impossible to plan for, like the arrival of the dark field, like the outbreak of a virus. No one predicted or controlled such events. Things fell apart with appalling fre-quency. Looking at the history of civilization, it was as though entropy itself was at work, nibbling away at human hopes. To judge by the chaos of the universe, humans were an acciden-tal—and temporary—phenomenon.

Ice was his testimony to a contrary process, one of perma-nence and order. So if the ship was to upset everything, he cer-tainly held it against them.

Then the timing of its arrival, causing Ice to waken him in a flawed condition.

The Watch-Out subroutine was his own design. *Watch out* for certain conditions that could thwart goal achievement. If they occur, wake me. Ice determined that the arrival of the gen-eration ship fulfilled that criterion.

For better or worse, he was awake. Ice was working on the problem of unnatural hunger. He must be patient. Staring across the icy corridor, he regarded the grand planes of Ice. Such a long way he had come. That bore remembering.

He had begun as a researcher in the university artificial in-telligence program—the Looking Glass Project—so called be-cause the researchers fancied the notion that with true Al, humans could finally look into the eyes (or view screen) of an-other fully sentient being. Swan was brilliant, but they were all brilliant—those computer scientists gathered together to de-velop a new basis for AI and computer technology. Other AI systems were getting too big and too patched up. His team's ap-proach exploited advances in photonics and, in a leap of bar-riers, created the first stable quasi-crystal: until then a mathematical concept. Looking Glass had an entirely new plat-form: opto-quasi-crystal. OQC Looking Glass was enormously successful, achieving inductive reasoning within a few years. The new platform blew past microprocessing's .1 micron bar-rier, whereby silicon circuits could not be shrunk further with-out leaking electrons. An entirely new technology had arrived.

Just in time to record the end of the world.

Dark matter. It was a massive cosmic structure. People called it a dark cloud. They looked up, expecting to see some-thing blot out the sun. But it was an invisible field, far away but close enough. Deeply information-poor, it attracted many forms of information to itself, leaving noise—and chaos—be-hind. They had time to theorize that information can in a way be considered a physical entity. It has bits and molecules that contain organized data. Such information wasn't normally sus-ceptible to deterioration, not in that manner. Yet the informa-tion began moving from here to there—from a higher state to a lower one. They never figured out the mechanism, but the con-jecture was that the cloud's field "read" the information in the most accessible formats on earth, including hard drives and cells, and in the process of reading the information, it trans-ferred the information to itself and then to the cloud of dark matter.

Snatching the most available information first, entropy forces quickly degraded electronic records. The information in biological systems—in DNA and other molecules—had more stability. For a while. Flora and fauna began to sicken and fail. Scientists called it the Entropy Effect.

Ordinary people called it the Collapse.

As electronic files decayed into noise, only Glass resisted. It held information. It was the only thing that did. Across the world, scientists passed the nucleation points on to colleagues, and the scramble was on to encode research and data into quasi-crystal.

But not only did quasi-crystal encode and maintain infor-mation in itself, it also offered refuge in its very form and bulk. The entropy forces couldn't affect electronic data stored in Ice—or the people finding sanctuaTy under it. While political systems were still operating, the United States government di-rected a crash program to physically grow the Glass platform as widely as possible—both in the United States, and, by sharing the nucleation points with other countries—worldwide.

Toward the end, no one was in charge at the university. Lucian Orr was the one among fifteen team members with no family, to distract him from the final stages of Glass's program-ming. Some team members had already died or, watching their families die, were beyond caring about the Looking Glass Project or the future of the world. So Lucian Orr stayed, work-ing alone, living off the hastily collected stores of water and food. It was a lonely time, even for one who never sought com-pany. Then, there at coretext, he had his vision of how some-thing, at least, might be salvaged from all the ruin. He became obsessed with the concept of entropy, decay, death—and their opposites. And as he stepped into his metamorphic sleep, the Looking Glass Project stayed behind to mind the world, on its own. With just a little help from Lucian Orr.

OK, it was true that it had grown large. He had feared it might, but to achieve its goals, Ice must grow until it was large *enough*.

Apparently, it had farther to go.



Worley looked like he had something stuck in his throat. Fi-nally, he managed to spit it out: "The sisters are leaving."

He winced as Zoya turned a dark stare on him. "When?"

"Now, I'm afraid." he pointed up. "They're loading their sled." He stood in her way. "They've refused you an audience. I did what I could for you, but the good sisters do what they will."

Zoya wasn't so sure he did what he could. He and his Group of Five feared as well as courted her, sowing confusion, hedg-ing their bets. She had already concluded he had no influence with the nuns.

She grabbed her satchel and hitched it over her shoulder. "Take me to them."

He was still blocking her way with his considerable girth.

She smiled at him. "I want you to know, Worley, that your preserve's generosity will not be forgotten by my captain. We won't hold you to blame for this insult."

"Insult?"

"The nuns' insult."

Zoya pushed past him into the corridor. A group of people who had been sitting outside her quarters rose, murmuring her name. They had been gathered there all night. Little piles of trinkets were accreting near her door, so that she had to pick her way carefully to avoid tripping on them.

"Where are the Ice Nuns?" Zoya called out to the people camped in the passageway.

A startled woman blurted out, "Topside."

Worley barged his way through the crowd to Zoya's side. 'Please, Zoya. The sisters won't be coerced."

"Perhaps just a nudge, then."

Zoya broke into a jog. The nuns were leaving, loading their sled. Evading her. She would find them again, but the cost of delay, the bitter cost... *Precious meters of ground lost every day*, Anatolly said. Ice advanced. The Rom were losing ground, los-ing their foothold before they even claimed it.

She scrambled up the ladder.

Pushing past the few nuns who were tying up gear in the tower room, Zoya strode out into bright sunlight. It blinded her at first. The day glared off white drifts. In patches where the wind had swept the area free of sand, the surface gleamed unnaturally, like the dull white of cataracts.

There, spread out in a line, was the impressive sled of the Ice Nuns. Larger by far than Wolf's, the vehicle had covered compartments hitched together behind a large cab. The hous-ing and runners were pure white, like a polar animal.

And there were groups of children, perhaps thirty or forty. Little knots of worried faces. Some were crying.

The nuns' black robes fluttered in the brisk wind, giving them the look of crows riding thermals.

Zoya took one nun by the arm as she passed. "Who's in charge here?"

The sister's look of alarm soon decayed into a darker look. She freed her arm from Zoya's grasp and pointed to a nun near the lead cab. Zoya marched in that direction, down the line of small forms bundled in jackets and caps against the cold. Nuns were ushering the children into the cabs, where the side doors were thrown open. Why were children being taken? Where were the parents?

A cry drew her attention. A boy about nine years old was struggling with a nun. Two more nuns entered the fray, subdu-ing him.

Zoya broke her stride. She changed direction. Part of her said, this is *none of your business*. Part of her said, *getyour damn hands off that boy*. Something was rising in her stomach, in her chest. It was an upwelling that could have lifted the whole sled and toppled it.

The next thing she knew, she was yanking the sisters away from the sled and interposing herself between them and the boy. She surrounded him with her arms, panting with exertion. The sisters were glaring at her, talking so fast she couldn't keep up with it, but she could imagine the gist. The nuns surged for-ward to snatch the boy, but she held tighter. It was a standoff. Now, more dark-robed figures were headed in their direction. Well, this was not exactly keeping proprieties. Anatolly would not be pleased.

She stroked the boy's head and spoke to him softly. "Where are your parents?"

He jutted his chin at the tower. His lip trembled, quashing his attempts to speak.

"You can tell me, it's all right."

"My dad doesn't want me to go. He *doesn't*," he said with some defiance, huddling against her.

Struggling for decorum, Zoya turned to the nuns. "This boy is terrified. What are you doing?"

Zoya held on to the boy, cradling him in front of her, arms over his chest, daring the nuns to intervene. Worley stood be-hind, shaking his head.

"It's a done deal, Zoya; the price has already been paid. Let the boy go."

"Price?" She turned on him. "You're selling him?"

Worley's face was red in the cold air. "We got a fair price."

She gripped the boy even harder. "You... don't... sell... children." Her words came out like bullets.

Worley drew himself up. "I didn't sell them. Their parents did." At her look, he shrugged. "I told you we were a poor pre-serve."

Around her, the black robes herded the children into the other cabs. The sun shone in stony brilliance. The children marched into the white cars, quietly, obediently. Everything was calm and orderly. Shivers ran in waves over her, but not from the cold.

She fixed her gaze on the circle of nuns that had grown around her. "This boy wants his father."

From behind the group of black robes came a voice, saying, "I'm afraid it's not mutual, actually."

It was the sister that Zoya had seen when they first arrived, Sister Patricia Margaret Logue.

She was leaning on a cane, gazing at the scene with bemuse-ment. "The boy's father is sending him to us for his education."

Zoya said, "Why is that so hard to believe?"

The nun came close. "Because you are from a quite different world, my dear." She glanced at the sky. "Such a nice ship. All the comforts?" Her tone changed. "And how did you like the preserve, where this boy was destined to live?"

Sister Patricia Margaret firmly took the boy by the arm and met Zoya eye to eye.

Zoya knew what Anatolly would have her do. Slowly, she re-leased her hold. Diplomatically it was the right thing to do.

At that moment she hated diplomacy.

Handing the child off to the waiting nuns, the sister turned back to Zoya. "The boy's father is twenty-eight years old, and has already lost half his teeth. He had the boy working in the mines, though the child tests high in mathematics and lan-guage. Our resources are limited, or we would take them all."

The sister nodded at her assistants, and they firmly pushed the boy back into the cab.

Zoya met his eyes, and it brought her anger back in full. "These children will pay a terrible price—for their *education*."

The nun shrugged. " 'We live in the middle of things which have all been destined to die.' Best prepare

when we are young." She raised a white eyebrow. "You know Seneca?"

"The philosopher."

Sister Patricia Margaret nodded. "A great consolation. I rec-ommend him to you." She turned and walked away.

Zoya was so surprised by the summary dismissal that she hesitated. But only for a moment. She charged up to the sister, cutting off her path. "I'm not going away, Sister. You may wish I would, but my captain has urgent business with you. Or your superior."

"Our *business*, Zoya Kundara, is of the spirit. I leave *enterprise* to the preserve." She glanced at Worley, and he bobbed his head in reply.

Zoya held her eyes. "My captain is a determined man. I'm afraid he will insist." Anatolly might be quite incapable of in-sisting anything of the sort, but it wouldn't do to admit it.

"Even a determined man must await the right moment."

"Seneca?" Zoya asked dryly.

"No, that was my own." She smiled at Zoya, and her face took on a more approachable aspect. "Be patient, Zoya Kundara. We'll be back to this preserve in a few weeks. Meanwhile, I'll bring the matter up with Mother Superior." She turned to go.

"Can I come with you?" Zoya blurted out.

Sister Patricia Margaret turned back to gaze at Zoya. "Sorry, our sled is full."

Worley trotted forward, saying, "But Sister, this woman is of high standing, and her ship..."

"Full," the sister repeated, and hurried on.

Zoya wondered if the sled would have been/ull if she'd been more conciliatory. It was a damn hard line to walk, diplomacy.

Worley walked back to join Zoya, as she muttered, "There's room on that sled."

He shrugged. "The nuns do..."

"... what they will. Yes, I've heard it before." She paused. "Who's in charge at the... Keep?"

Worley's eyes looked rounder than usual. "That would be the Mother Superior Solange Arnaud. She never comes here."

"1 imagine she doesn't." As the cab doors began to close, she noticed a tall black woman. The young woman who'd tried to give her the robot. She was watching Zoya, and nodded to her from her seat in the cramped sled. Apparently not all the new acquisitions were children. Zoya nodded back, mustering a smile of reassurance. It felt as hollow as it was.

"Did you sell that young woman too?" Zoya asked.

Worley glanced in the direction Zoya indicated. "Kellian Bourassa. She's old enough to choose. But I won't miss her, she's a troublemaker."

Good, Zoya thought. Make lots of trouble, Kellian.

The door slammed shut on the young woman. All down the line, doors clanged shut. The nuns flapped to their lead cab, and the engine started with a high-pitched whine of its pre-sumably electric motor.

The great sled began to move off, its runners creaking on the Ice, its covered cars bearing the children to a better life—in the nuns' terms, at least. The boy who had clung to her had never had a chance. Bound by diplomacy and outnumbered, Zoya couldn't save him.

The sled left two parallel tracks in the white sand. It was a trail that she intended to follow.

Beneath the sound of the sled motor Zoya heard an awful, muffled bellow. It came from the innards of the white sled.

The snow witch was still alive, God help him.

## **PART II:**

# Forest of the Night

## **CHAPTER EIGHT**



A hatchet-faced nun threw open the door of the cab, flooding the interior with blinding light.

After the cramped journey it was a relief for Kellian to get out and stretch her limbs. Blasted by the frigid air, Kellian gazed straight into the face of the Keep. It loomed massively, even at this distance of a half mile or more. Its smooth stone fac.ade mirrored a fiercely crimson sunset.

Children piled out of the sled onto the barrens. One cab re-mained closed. Everyone knew the nuns had a snow witch. Its cries were louder, absent the drone of the caravan's motor and the scraping of runners over Ice.

The nuns were giving orders, herding the girls to one side of the sled, and the boys to the other. They were made to disrobe and stack everything into neat piles, even underclothes and any other possessions they had managed to bring with them. Kellian clutched the tronic file in her hand. The wafer held her diaries and research notes. Contraband now.

She had time to gawk at the terrain, so different from Ancou preserve: the ruined city of Seetol in the distance, with its skewed towers; and Mount Raneem in the south, larger than any one thing in the world—in her old world.

A little girl with unruly black hair stood next to Kellian, her arms wrapped around her little chest. "I'm cold," she said in a blameful voice, as though anyone would care.

Down the length of the coupled sleds came the nuns, hand-ing out new garments, while Kellian slipped the wafer into her thick hair, just above the clasp that held her braided locks close to her neck.

All eyes were on the nuns' castle. Built from stone quarried deep below Ice, they said the place took one hundred years to build. Each stone was perfect, placed by the brothers who served the nuns. In the center of the edifice, massive twin pillars framed a doorway large enough for a giant to pass through. The rest of the nunnery spread out into two wings, with slick black walls slanting toward crowning parapets. Slits of windows squinted at her. Apparently the nuns didn't look out much.

They called this the Keep, or sometimes, the Zoft, after the gigantic uplift of Ice called the Zoftian Rise, against which the Keep huddled. It was said that long ago an earthquake erupted on the barrens, creating this great escarpment. Along the mas-sive vertical fractures of the rise leaked stains of light. Ice some-times spoke to the nuns, so the legend went, and so it looked, with colors flickering like lightning strikes.

The lesson of this stop on their journey was clear. In front of these adamantine walls you were a suppliant; you were noth-ing. It seemed an ominous beginning for her great adventure.

She looked up at the sky, searching for a telltale gleam of the great ship. The vessel was cloaked in dazzling blue sky. But Kellian knew it was there. She had met the lady of the star ship. What knowledge did the sisters command, she wondered, and what more did the ship know? So despite the cold wind sweep-ing over the land, despite the forbidding aspect of the Zoft, Kellian could barely contain her excitement.

The nuns came down the line, handing out dun-colored robes. Sizing up Kellian, the sisters had to rummage through their stack to find a robe long enough. By the time they found one, Kellian was shivering hard. She dragged the nun's fine wool over her head and shoulders.

It was only a uniform. It wouldn't change her. She patted the back of her hair, with its smuggled file.

With Kellian in tow, Sister Patricia Margaret paused before the door to the dormitory.

"These postulants work in my group. For the most part, they're decent girls. Try to get along." She lifted a white eye-brow, waiting for Kellian to give the proper response.

"Yes, Sister."

"Remember, my girl. You *wanted* to be here." Sister Patricia Margaret looked over Kellian once more, her eyes tracing the mass of wiry hair. "Tomorrow, a shave."

With that, she opened the door.

The room was rilled with bunk beds. Each one had flat blan-kets tucked in on all sides. It was hard to believe all the people within slept there, for no item was out of place. Young women lounged on the bunks, but with the interruption, sat up and nodded greetings to the sister.

"This is Kellian Bourassa, come just now from Ancou pre-serve. Welcome her, and show her the ropes. She'll be working with us."

"Yes, Sister," came a chorus of soprano voices.

The postulants wore light brown robes like Kellian's, except some were gray. And one was white.

The one in white stood in the middle of the group, and now came forward, curtsying to the sister. With a rounded face, she was rather plumper than Kellian was used to seeing, and Kel-lian hoped that boded well for the food.

"This is Hilde," Sister Patricia Margaret said. "She'll help you get settled." The sister said this rather more pointedly than seemed necessary.

"Yes, Sistef," Hilde murmured. She glanced at Kellian, smil-ing. "Ancou is far from here. You must be tired."

Kellian heard the door close behind the sister, and watched the smile slide off Hilde's face.

The women and girls—some looked to be no more than thir-teen or fourteen years old—now sat staring at the newcomer, with appraising looks. She did present a rather different picture. Some of them were dark-skinned, but none were as dark as Kel-lian. Heads were shaved. It looked cold, all those bare skulls.

Hilde circled around Kellian, stopping in front of her. "That's your bunk." She cocked her head at an empty one in the middle of the room. "Go ahead, get settled."

"Where's the toilet?" Kellian asked.

Hilde smiled. "Through that door."

The latrine was wonderful, with doors on the stalls and commodes with rounded seats. Kellian took a long piss. She was so tired and comfortable she thought she could sit there and just sleep. The nuns might be child-stealers, but they knew how to make some things pleasant enough.

When Kellian returned, everyone was waiting for her, watching. She went to her bunk and sat down. "What are you all staring at?"

Hilde shook her head. "That's three. You all saw, that was three, wasn't it?"

"Yes, Top Hilde," came a uniform murmur from the bunks.

Kellian's heart began a slow drop. The room was under Hilde's control. And, she began to fear, so was she.

Hilde said, "We have a few rules here, Kell. Unfortunately, you've just broken three of them."

"What rules?"

One of the postulants, a young one on a top bunk nearby, gave a slow, pitying shake of her head.

"For example," Hilde said, "speaking to a top without being spoken to first."

Kellian forced her body and face to remain passive.

"For another, you went counterclockwise to get to your bunk. Only tops can go that way. Everyone else, clockwise. Keeps the traffic patterns in the dorm orderly." When Kellian didn't react, Hilde advanced a few paces. "But I don't need to explain why. Mostly, I won't explain."

"My name's Kellian, not Kell."

Hilde's face broke out into a bright laugh. She glanced around the room, shaking her head, getting mirthful expres-sions back from her cohorts. "That's four. You're going to be trouble, I can see that. Well, you're older than we usually get. I'll try to take that into consideration."

She hooked a thumb into the belt of her white robe and continued, "Listen up: Every time you go to the latrine, you re-cite everyone's name before you can leave the room." Hilde spread out her arms, "OK, innies, recite your names."

From a bunk in the corner came, "Mar."

Then, next to her, "Jace," and "Alb" and all the others, little, piping voices from each in turn.

"When you go, you put my name first, then everybody else's." She sighed. "Let's see, what else? Oh, no inny can have a name longer than one syllable. If you ever reach white-robe status, you can have your long name back. Innies are invisible, that's how they get their name, inny. That's a clue for how you should act. I don't give lots of clues.

"The tops in each dorm dole out the judgments. So, being that I'm the top, as penance for your four errors, you have to go clean the last stall in the latrine. That stall's dirty. Probably hasn't been cleaned since the last newcomer."

Kellian sat, considering her options.

Four large girls closed ranks with Hilde. They looked eager to get their hands on Kellian.

She summoned a cool temper. Her mother's words whis-pered to her: *Make nice*.

As Kellian walked past Hilde, the woman said: "I could have been a lot meaner. You're getting off easy." Kellian locked gazes with her.

"And it's not just because of your skin, either. I'm fair. Ask anyone."

"You're fair, Top Hilde," came the chorus.

"Now go," Hilde said.

Kellian went to the latrine door. She turned around. "Hilde," she said. "Mar, Jace, Alb, Lon, Harp..." She continued recit-ing. She had learned the names the first time around. And Hilde was learning that Kellian had a good memory.

Later, scrubbing stains that seemed to have taken up perma-nent residence in the ancient floor tiles, Kellian heard the next stall door open. Instead of using the commode, the postulant brought a pail inside and started cleaning.

The little arm was skinny, the hand no larger than the scrub brush.

"Who are you?" Kellian asked.

"Nit."

They scrubbed in unison for a while. "What did you do?"

"Got a spot on my robe."

Kellian looked down at the spots she had already incurred from splashing dirt on herself. "What are the rest of the rules?"

The brush next door went back and forth, delivering up brackish suds. The scrubbing and soap made the latrine smell worse, releasing the acrid odor of urine from its dried state.

"Tell me the rules, Nit."

"I'm not supposed to."

Quick as a rat pouncing, Kellian's hand grabbed hold of the little wrist. Nit froze.

"I won't hurt you, Nit. But I have to know the rules."

The little wrist twisted under her grip. "What've you got to trade?"

Kellian released Nit. "Nothing. I've got nothing right now." She sat back on her haunches, staring at the commode. "But I will."

"Well, future doesn't count."

Kellian retrieved the tronic wafer from her hair. Then she felt behind the commode for a hiding place, finding a loose tile that might serve to keep the wafer off the damp floor.

"It counts."

"Shh. They'll hear us."

Kellian crouched down, looking under the stall. Nit was skinny and dark, about fifteen years old.

Kellian whispered, "Someday you'll need a favor, Nit. When you do, I'll be there."

"How do I know?"

"It's a risk. But it could pay off big. You want to always be stuck cleaning Hilde's toilets? Is that what you want? I'll bet you want more than that."

Clutching her scrub brush, Nit watched her from deep-set brown eyes. Tears sparkled at the corners. After a moment she bent to her task of scrubbing again, using both hands to rake the brush over scummy tiles.

Kellian straightened up, rubbing the small of her back. She already knew one new rule. No spots on the robe. She took hers off, hanging it up on the door peg. Then she resumed cleaning in her slip.

A noise came from the next stall. Nit was whispering to her.

It was the rules.



The nuns had been gone a day and a half, but the tracks of their sled still cut a clear trail southward. To follow them, Zoya had managed to enlist Wolfs help once again.

It would be a cold ride, but it needn't be. Anatolly could have transported her with the shuttle. Instead, the craft merely made a drop of supplies. Lieutenant Mirran could hardly meet her gaze. Then, following orders, he left in the shuttle. And all because Anatolly—sensitive Anatolly—feared alienating the Sisters with a show of power.

"Anatolly," she had begged, "there are rats. And the sled is very cold."

He was unmoved. "If it grows too dangerous, you should come home."

"What does Janos think?" she asked in mock innocence.

"He's in complete agreement. After Mother Superior's call, we have a relationship to foster. No need to brandish our capabilities."

"Pardon, Tolly, but that's such nonsense."

"That incident with the children didn't help things, Zoya."

"How do you know? Maybe they need to know what we stand for."

"It doesn't help to make enemies."

She sighed. "Make an enemy, Anatolly. It would do you good."

He put starch in his voice. "Zoya Kundara, I'm still your captain."

Last week, when Anatolly had been twenty-four he wouldn't have hesitated to take Janos on. Anatolly was no longer her young lover, but when she couldn't see him—as when she spoke to him by radio—she found herself calling up an earlier version of the man.

Then and now. She really must try to keep them straight.

"Yes, sorry," she told him. She had placed herself under strict command of the ship's captain, each of them in turn, over the centuries. Someone had to lead.

So she would accept Anatolly's decision that her mission should not alienate the dark sisters who, apparently, were no *sisters* at all. Her own approach had clearly worked no better, and possibly worse. The one bright point was Anatolly's recent contact with Mother Superior. She might be more open to con-verse than Sister Patricia Margaret Logue.

As the giant craft roared aloft, Wolf held on to the amulet around his neck, as though it might offer protection not only from the invisible darkness, but also space shuttles.

"Your people are loud," Wolf said.

Of all the descriptions he might have come up with, that was an odd one. "We aren't a timid people. Perhaps quietness is overrated?"

"Loud is overrated." Wolf was securing the load on the cargo sled, which now contained decent tube food, an experimental Ice interface that Mirran's research team had put together, and a rich payment in goods for Wolf. His price had gone up since the last ride.

She watched him in silence. His hand worked the ropes with economy and strength, nothing wasted, nothing half-hearted. Like a creature in a chain of predator and prey, he both concentrated on his task and on his surroundings. He watched the barrens, smelling it, tasting it, alert for movement, even when to her the land seemed bleached of sight and smell.

But the ground beneath her feet held information. Lieu-tenant Mirran confirmed it, having read the light pulses, or some of them, shreds of disconnected data, equations, words. -.: base camp, they'd quickly tapped into fragments of informa-uon. Fragments, without context, without meaning.

Working in cooperation with Vlad's group on Ship, Mirran confirmed that aspects of Ice were involved in information storage, possibly across vast geographic tracts. And more, that it likely manipulated data. If that was the case, it was a computational platform on a global scale. No wonder the preserves re-garded it with superstition.

The computational architecture was optical, as they had guessed for some days. The hardware was crystalline, and de-pended, Vlad said, on the atomic onentation of crystal lattices. In their brief conversation, Mirran alluded to a code of light beams that might or might not pass through a filter, corresponding to a binary message of ones and zeros. Amplification re-sulted from reflecting back and forth between the different planes of crystal in an unknown manner, given their present understanding of quasi-crystal.

*Imagine* what could be done, he'd said, where an optical computer—always theoretically possible—had no need of miniaturization?

Yes, *imagme*. And look around you. To a geography of infor-mation.

Powered by sunlight. Vlad was guessing, but it was a good guess. The sun was dumping stupendous amounts of solar en-ergy onto the expanse of Ice. From there, Ice must take incoming photons and convert them directly into electrons to power its processes, perhaps as efficiently as plants using photosynthesis.

Zoya brushed away the white sand from the patch of ground near her feet. It was transparent to a certain depth. She peered down into the clearing, into a pale turquoise stratum, beneath which currents of information might swim. Leviathans of pur-pose, schools of silvered thoughts.

Why is it still growing? Alger's question pushed at her. If its first program was to grow and fend off dark matter, did it now have a second purpose?

A shadow turned her view opaque. Wolf stood beside her, blocking the sun.

Zoya said, "You don't worship it, do you."

He snorted. "Do you worship the sky?" By his expression, he knew the answer. "It deserves respect. Like most things that can kill you."

"Ice can kill?"

He shrugged. "Look around you."

She quashed her annoyance at being admonished. She was new there, with no help for ignorance but to accept a little schooling. She rose, following Wolf to the sled. The shuttle had by then disappeared over a ridge of hills, and they were left in the silence of a wiped-clean world. Small puffs of clouds wan-dered overhead, throwing moving lakes of shadow onto the land. Here and there, hills of Ice marked the former domain of islands, while in the east the dark spines of the Cascades—what Wolf called the Cadian Mountains—protruded through the mantle; to the southwest, she could make out the Oloms, the Olympics. To the west, beyond the former Vancouver Island, lay the great Paz, the white expanse now covering much of the ocean. The vast basin between the Cadian and Olom Mountains was the Val Paz, and it was down this immense trough they would make their way to the Keep.

Wolf climbed into the forward car of the sled. She eyed the rear sled, where Wolf had cleared a space for her to ride. It would be a full day's ride, Wolf said. A long time to sit, devoid of conversation.

"Wolf," she said. She approached him, looking up at him as he stood in the sled. "Perhaps you'd be glad of some company, there in your car?" She smiled.

When he didn't respond, she thought she might have mis-spoken. Though she hoped she was done with translations, she activated her ear lex and tried out her query again. No, she had it right the first time.

"After all, it's a long trip with no one to talk to."

A smile poked at one corner of his mouth. "Quietness is un-derrated."

"Trade, perhaps?"

His eyes narrowed, and he pawed at his beard, looking over the considerable stash of booty he had

already extracted as payment for her transport to the Keep.

"We're done trading."

She laughed. "Oh, Wolf, there is always something one wants." Lest he misunderstand what sort of thing she was will-ing to give, she added: "I have good food, packaged for travel. Quite delicious. And foot warmers, socks that stay warm no matter what the temperature."

He stared at her feet suspiciously.

Yes, now that she was started in this direction, it was an ex-cellent idea. Wolf wasn't altogether bad company. And, super-stitious as he might be, he knew more than she did about the land and about the sisters she would deal with. She touched the diamond studs in her left ear, thinking how she would arrange her seat just so, in the driver's sled, so she could look out over the windshield...

"Stones," he said.

"Beg your pardon?"

He brought his hand up to touch his left ear.

She stared at him. "Those are not for trade."

He nodded, then turned away.

"Flashlight, sunscreen, dark glasses..." she recited the al-ternatives.

He didn't look at her. "Stones."

He was insufferable. The fellow had no inkling that he had just asked for her entire fortune in exchange for a simple berth on a sled.

"These are just stones." She pointed to the black mountain peaks. "Like those, just dead rocks."

"Trade," he said again.

"What, all of them?" she said in exasperation.

"One." He gestured to his compartment. "We will talk. No need to be quiet on such a long trip."

She narrowed her eyes, gathering patience. One of her dia-monds... an astronomical fare, even for the least of her four stones.

"My mother gave me these," she said, taking a different tack. Her mother had passed on to Zoya the matrilineal diamonds in full, without ever having lost, sold—or traded—a single one for worldly advantage. Yet Zoya found herself considering the proposal. Here was a man on whom her success now de-pended. A man who knew of the world, in ways she didn't. But should. And if she were to give up her stones, could it be for a better cause?

She walked forward to the driver's sled. "One stone," she said, her voice faltering. She pointed to the small one at the tip of her row of diamonds.

Wolf shuffled forward, peering closely at her ear. She saw the flash of the diamonds light up his eyes. He pointed to the large diamond that anchored her earlobe.

Her voice dropped an octave. "Don't push your luck."

"Small one, then," he said, as though she had just cheated him.

She ran back to the cargo sled and gathered her things, those items that might be useful once they were under way. When they had finished arranging the driver's sled, Zoya sat down to unscrew the backing from the diamond stud.

He accepted it from her, taking it securely between two blunt fingertips. As her heart sank, he plopped it into his jacket pocket like a wad of chewing tobacco. Then, for the first time in their brief acquaintance, he smiled, a powerful smile that brought fire to his eyes for a moment. But she had a hard time, just then, smiling back.

And they were off.

Zoya adjusted herself upon the seat, finding it remarkably comfortable. It should be, given the price she had paid. Beside her Wolf chose to stand, as he so often did, and, foot to acceler-ator, he eased the sled onto the track that the Ice Nuns' sled had left behind.

They picked up speed, and soon were cruising easily through the valleys of Ice. Under the shelf of Ice lay the waterways of a previous age, straits with names that no longer applied: Georgia, Haro, San Juan. Now it was simply the Val Paz.

She looked up at Wolf. "What is the Keep of the nuns like?" He'd said he'd traded there.

"Big."

She waited, but he stuck by that version.

From what Anatolly said, the nuns saw Ice less as a problem than a resource. Where the preserves mined it for urban sal-vage, the Keep mined it for information. If it was information on how to stop Ice's growth, then the Rom shared a goal with the nuns. But if thwarting Ice was the nuns' mission, they had certainly not gotten far.

"Do the nuns talk to Ice?"

Sometimes he answered, sometimes he ignored her. At last he said, "They don't tell me what they do."

"Sister Patricia Margaret will be surprised when I show up," Zoya said, thinking of her rebuff from the woman.

"They know you're corning."

She turned to Wolf.

"Radio," he said, stating the obvious.

So the nuns wouldn't be surprised to see her, and perhaps not pleased, either. "What is the mother superior like?" she asked. "Have you met her?"

Wolf slowed the sled and looked at the ground beside the runners. Then he resumed speed, scanning the hillocks of Ice. Zoya got in the habit of watching the crests of hills, enlisted in the search for snow witches, hoping not to see one. Especially not one like the first she'd seen, red rags flapping around his body like strips of flesh...

When he answered, she had almost forgotten her question.

"She'll pay anything for what she wants."

For snow witches. The man did like his blood price.

"Will you sell Snow Angel to them?"

"No." He barely opened his lips to let the word slip out.

They cruised on for many minutes, with only the hum of the electric motor for company. At last Zoya said, "Tell me a story, Wolf."

He gave her a sour glance. But now she knew he was capa-ble of a smile.

"Such good stories you tell, Wolf." What did you\* think, I'm here for the view?

His shoulders hunched up, and he exhaled a long sigh. Per-haps he was beginning to wonder if he'd gotten the worst of the bargain.

But from her viewpoint, a story would be a good way to be-gin a journey. And she wanted value, by God, for that dia-mond.

She looked up at him, hoping he had another story in him.

He did. He began:

"Once upon a dark time, much like today only different, the child Shinua—" He looked down at Zoya to see if she remem-bered the name.

She nodded, waving him on, turning off her lex. She wanted to enjoy the cadence of his words without the ghost of the translator always dividing her attention.

"The child Shinua was left in the keeping of Old North, who promised the Queen of Light that she would hide the child un-til the day when the queen came back."

The sled's engine purred like a big cat, and Zoya felt her spirits lift. She hoped it would be a long story.

After concentrating on his driving a few moments, Wolf continued: "The witch, Old North, wasn't used to children, and she was glad she wouldn't have to care for the brat, only hide him somewhere where he would be safe from the Dark Prince. Besides, she was old, and she didn't want to listen to a lot of prattling and unnecessary talk." He looked down at her to emphasize that point.

"He cried, saying good-bye to his mother. Then Shinua gave his hand to Old North, and she led him away into the hills. He was brave, and wasn't afraid that he must go to sleep for a very long time, but he thought he might be lonely. He asked Old North if she would keep the humans and animals too in her snowy protection, so that he would have company.

"Now, Old North was ugly, but she was no fool. She knew the child had powerful relatives and might have something of value to bargain with. Old North asked him how he would pay for such a large favor. But all Shinua had was a string onto which he'd threaded beans of various colors. When Old North saw how little he offered, she knocked it from his hands. So the beans scattered across the world. In each place a bean fell, an animal, bird, or fish fell into a sleep, and when the snow began falling, all the animals slept, and humans too.

"After Old North laid the boy in his icy bed, she retraced her route to her hut. On the way she began to worry about what she had done. She thought—knowing something of magic—that the beans might sprout and cause her trouble."

Zoya nodded. Yes, those beans. She could guess they'd not lie fallow for long. She liked the story, and appreciated how Wolf had chosen one on trading.

He continued: "Retracing her steps back to where she left the child, she looked for the beans. Too bad, she had scattered them a long way. But it happened that a few wrinkled beans had fallen nearby, and those she scooped up since she could find no others.

"When she got back to her hut, she put them in a covered bowl in a dark corner of her kitchen, where they got neither sun nor water. Since Old North was getting dusty in the head herself, she forgot all about them. Then, one day when she cleaned house she found the beans in their bowl and threw them into her yard."

Aha, Zoya thought. Now the trouble begins.

"At the first rains, the beans sprouted, but like Old North, they had frozen hearts. Old North looked out her window and saw that there were children in her dirt yard, but, as you will remember, she didn't much like children. Anyway, there were too many of them to feed, so she drove them away, saying they must fend for themselves.

"They ran off from her anger, and as they ran they grew up, and turned into ugly shapes. Even as they ran away, Old North hated to hear their noisy yelling, so she put a spell on them, that they should never speak. Now the bean-people spread out across the world, hungry, angry, and silent. And so the snow witches came into the world, where they still re-main."

Zoya sighed. It was so like the old stories. The endings were seldom happy.

She looked at her storyteller. "Perhaps Old North will have a change of heart." It would be nice for the bean-children to have a second chance.

"Hearts don't change," Wolf said.

She sighed, turning to stare out at the barrens. It would take a little more work to get good conversation from the fellow.



Sister Verna lay propped up in her bed, asleep sitting up, with toast crumbs on the front of her nightgown. An empty teacup had fallen to the side of her thin body.

She startled awake, seeing her visitor.

"Mother Superior..." She fumbled for her glasses.

Solange smelled a whiff of perspiration, and went to the window to open it a crack. Unfortunately Sister Verna's cham-bers faced the refuse pile at the south end of the Keep, so the outside air was not an improvement. Past the refuse stretched the eternal barrens. Usually a daunting view, the plains of Ice now seemed more hopeful... not glaring, but glowing. Ready to speak.

Swan had likely slept in Ice, slept since the First World. Where else could he have come from, he and his key to the Enunciation?

"Mother Superior, I didn't expect anyone." Sister Verna was still pawing for her glasses on the nightstand.

Solange approached the bed. She picked up the glasses and placed them carefully on sister's face.

"Oh thank you, Mother Solange. I certainly didn't expect you. I'll get up."

"No, Sister, calm yourself. I'll sit by you for a moment." Solange drew up a chair. Sister Verna was retired, with unfavor-able quarters, but the old woman didn't seem to mind. She was bedridden with arthritis off and on, yet still visited the astron-omy unit on the Keep's roof several times a week. Although as-tronomy wasn't a priority, Solange encouraged the sisters to follow favorite pursuits. It did no harm, and could pay off—as recently when Verna's unit detected the ship in orbit.

Solange picked up the teacup and placed it on the night-stand. Sister followed this movement with dismay.

"I hope I didn't spill."

"The cup was empty."

Sister sighed, with apparent satisfaction, as though spilled tea were her greatest worry these days. As perhaps it was.

A shaft of light from the westering sun crawled up the deep reveal of the window, crudely measuring the onset of night. Solange would be awake late into this night, and not because of a guest in her bed. Conversations with *Star Road* filled her mind. Several conversations now, that mapped the territory she wished to explore: the politics of the ship. Which they called simply Ship, it being their world until now.

This was the territory: a monoculture, distinctly Romany and middle European, Old Catholic, quasi-military governance tempered with elective processes. Fractious politics like small, contained explosions kept the civic environment vital, and a deep-seated religious viewpoint glued them together in com-mon cause. Overall, a remarkable nomadic folk migration, in-tended to find a hospitable new world, but failing in that goal. A return voyage made more urgent by dwindling birth rates. Current administration: Anatolly Razo, elderly captain with a brittle attitude; a younger, and influential first mate with more flexibility. Ships critical concerns: Ice, ethnic preservation, and the combination of the two. Current strategies: attack Ice's en-cryption; understand earth's social structures; open dialogue with the Sisters of Clarity—thus Zoya Kundara's mission. Long-term goals: a hasty conclusion to seek restoration of the First World.

Missing information: Star Road's state of technology for in-terface with Ice.

"Sister Verna." Solange said. Sister was drifting off again. Perhaps she was not so overawed by mother superior's visit af-ter all. Solange found that refreshing. People tended to fawn.

Sister opened her eyes. "Yes?"

"Are you comfortable?" Perhaps she was hitting the pain meds too hard.

"Oh yes. I just meditate when the pain comes. Otherwise, I sleep too much."

"I have a few questions about the ship."

Sister blinked. Then she remembered. "Yes, it's still there."

"That wasn't the question."

"I'll do my best with questions, Mother. You might do better to ask the other sisters. They do all the work." She chuckled, as though that were sly.

Solange wouldn't ask the others. She preferred a chat with a woman who was less connected, less likely to chatter. Not that there was anything in particular to hide, but she hid everything on general principles. It was all very well for an organization like *Star Road* to argue things openly. They had religion to unite them. The Zoft kept its secrets, inside and out. For example, there was no electronic messaging here. No electronic chatter and interconnection. No in-person chatter either.

Solange began, "What level of knowledge is required for star travel?"

Sister Verna pushed her glasses farther up on the bridge of her nose. "Knowledge? Oh, most everything."

"Such as?"

"Oh, such as advanced knowledge of propulsion systems, navigation, astronomy, momentum, gravity—including artifi-cial gravity. Mathematics, of course. I'm just rambling." Solange nodded for her to continue, and she complied: "Optical inter-ferometry for planetological surveys, biological and biomedical advances for food production and life extension, such as sus-pended animation or hypothermia/hibernation..."

"Ironies?" Solange suggested.

"Oh my, yes. I said engineering, didn't I? Well, as to tronics, the ship must have extensive tronic systems, perhaps augmented by artificial intelligences. Radiation shielding, radiation harden-ing of systems, redundant components, fault-tolerant... espe-cially if dark matter ever manifested as it once did."

"What kind of tronics?"

"Oh, pick what you will. Quantum devices, perhaps. Or bionics. Optics is also good." She smiled at the little joke, and so did Solange. Optics was very good, it was Ice, combined with crystalline adjuncts...

Solange was starting to get the picture, a tantalizing one. *Star Road* likely possessed extraordinary technology, honed to perfection by the demands of space travel, and boosted far above the original superior knowledge of the occupants of the First World.

Swan was right to seek control of the ship. She wanted it too. She felt the paucity of her orders knowledge, resurrected over millennia, but still inferior to Star *Road*. Unlike the ship that had needed to expand its knowledge over time, the sisters had maintained a narrow focus. Not the best approach, per-haps. But even the ship seemed incapable of interface with Ice, if they spoke frankly.

She thought Captain Razo spoke frankly. He seemed not only guileless, but quite naive. So eager to placate... all it took was her objection to the use of the armed shuttle in the vicinity of the Zoft—and he capitulated immediately. Astonish-ing. He called it cultural sensitivity, as though the sisters cared about such things. True enough, the preserves might find the airships threatening—so she played upon that theme, as well.

It worked nicely to delay his representative's arrival, providing more time for her to develop other ship relationships. From Sister Patricia Margaret's reports, Zoya Kundara was already unfavorably disposed toward the order. Although that re-mained to be seen, Solange was finding the first mate more open-minded.

"Processing power," Solange said, nudging Sister Verna awake.

Unfazed, Sister Verna picked up where she'd left off. "Power and speed and versatility." Sister sucked on her teeth. "But then, oh dear, the problems: miniaturization, contamination of quantum devices by the outside world. Even more difficult, perhaps they employ neural networks—tapping into the hu-man brain..."

Yes, bionics. Sister Verna knew even less about that than Solange. And Solange knew so much less than Swan. Swan... every time she thought of him, she was filled with uneasiness and, at the same time, elation. Bionics was no doubt the key to Swan's interface. But that wasn't the only route, surely.

Sister Verna was saying, "I could ask my work group to think of more, Mother Superior. I'm afraid I'm out of touch these days."

"No, Sister. Don't discuss this with anyone."

Solange detected the fleeting hope on sister's face. Perhaps, even in her decrepitude, she was hoping for an assignment. Solange knew better than to ignore what people hoped for. It was the difference between her and Ana tolly Razo.

"Sister, I have in mind a mission for you. Nothing too stren-uous, but a contribution."

Sister Verna brightened. She brushed the crumbs from her bodice. "Yes, Mother?"

"But we won't discuss it quite yet." Solange rose from her chair. "We'll talk about it soon. For now, it'll be our secret."

A confused frown found a new pathway in sister's wrinkled face.

Solange stood. It was a deeper dusk inside the little cell than out on the barrens. She reached over to turn on the bedside light. "You'll be informed when it's time. Can you wait?"

"Of course, Mother Solange." She waved her hand around the little cell with its clutter. "I have plenty of time. Nothing but time."

That was not exactly true, but Solange appreciated the sentiment.

#### **CHAPTER NINE**



A half-moon diluted the night, turning Ice a spectral gray. That night, Zoya could almost persuade herself that she was in a po-lar region; the mind stepped into familiar patterns so easily, and the flat white expanse so *wanted* to be snow and ice. Her nose should know better. It didn't smell like snow or ice. She hadn't realized until then that frozen water *had* a smell. Quasi-crystal was, if anything, faintly metallic.

Zoya's small yellow tent—part of her resupply from Lieu-tenant Mirran—looked like the last spot of color left in the world. She should be inside that spot of color right then, sleep-ing, but sleep was, as usual, a dicey affair, and never of much interest.

All day they had followed the tracks of the nuns southward. The convoy of children was heading to the Zoft, Wolf's term for the nuns' Keep. On board were the snow witch and the unfor-tunate young woman who would be an inventor of robots. Now this bright young woman would do the nuns' bidding. Whatever that might be.

Zoya buttoned her jacket close to her neck and hunched next to the Ice formation—Mirran had dubbed them *information stacks*—where she'd been trying out her interface for the last hour or so. The information stack was narrow and tall, almost to her height when she stood. It was a promising stack—a live one, as she thought of it—because it lit up inside in fits and starts.

Wolf was keeping watch on a nearby hill. Always watching for the *pack*. Well, she was grateful for his vigilance.

Mirran's interface was a simple affair, an optical probe that she had to hold to the surface of the stack in order to attempt access to the quasi-crystal configuration. The science team had designed the optical scan to crack the programming code. So far all they retrieved were numerical sequences of the encryption, perhaps coded long ago. Someone wished to keep such probes at bay... but why?

Zoya tried following the pulses of light along the length of the stack, holding the probe close to the last flash of color. "Come on," she murmured. But Ice was stubbornly mute. De-spite that, despite everything, Zoya's spirits were high. It might be the usual euphoria following release from stasis. But she thought that this time, the feeling would last. She need never suspend her life again. Until the possibility presented itself, she had never realized how badly she wanted to be here, in the here and now.

She heard a noise behind her.

"What does Ice say?" Wolf stood a few paces away.

"Nothing."

He nodded, as though he could have told her so.

Zoya put down her interface. "What are you looking for up there?" She glanced up at the promontory where he'd been, hoping they weren't in danger on this, their first night out.

"Snow Angel," he said.

"A strange name." It sounded so peaceful for a murderer. She thought of lying in a bank of snow as a child, and flapping her arms—leaving in the snow the magical imprint of a snow-suited body about to take flight. "What are snow witches?"

He gazed at her steadily, not even ashamed to ignore her questions.

"Maybe the preserves drive off their mentally disturbed individuals, or their criminals, or others they choose to punish. Am I close?"

"No."

Cajoling him to talk was as bad as interfacing with Ice. She persisted: "Why do the nuns pay for witches?"

"Because witches speak to Ice. And nuns wish to."

She paused. Superstition, or something more? "How do witches speak to Ice?"

He looked off in the direction he'd been looking in before. "Ice is their master."

The mangled children of Old North. Sometimes she thought he took refuge behind stories. She wondered what he was hiding.

"If snow witches speak to Ice, would a snow witch speak to me?"

He looked at her with what seemed like concern for her sanity. "You saw a snow witch," he said.

*Alive, oh alüüive*. The wail still haunted. Wistfully, she quoted from his story of the bean children: "Angry, hungry, and silent."

He nodded. "So my ancestors say." He touched his chest, the amulet hanging there, as though saying the traditions were enough. Zoya was not one to argue with tradition. Or accept things at face value. It was at least possible that snow witches weren't silent and mad.

He was watching her. "Are you a snow witch?"

Now it was her turn to stare at *him*. "Oh, Wolf, such a ques-tion. I've told you who I am. If you need a label, I'm Ship Mother—for my people."

He looked unconvinced, weighing things with those hard blue eyes. "You can live on the surface. Despite the darkness, you thrive."

She shrugged, trying his own lore on him: "Witches don't make conversation."

"That's true." He pulled at his beard. "You could be a new type."

He must think if the *darkness* didn't kill her, she must be magic. "Wolf, there is no darkness. Maybe there once was."

He looked skeptical.

"We've been to the stars. There is no more darkness, not around here, anyway. It's gone now."

He looked out where the moon was plunging behind a ser-rated ridge of mountaintops. "Gone now..." His voice came in a whisper. As he turned back to her, a pulse of red light ex-ploded in the stack, firing the side of his face. He cupped his amulet in his hand. "Spring will come, then." Spoken in a flat tone, as though he'd rather it didn't.

"I hope so, Wolf."

He dug into his pocket and removed a small bundle. Walk-ing over to where she stood, he unwrapped the wad and of-fered her a piece of dried meat.

She accepted it, and sat down to contemplate how she would pretend to eat the dried rat jerky, with him right next to her. He sat down as well, taking a large wad into his mouth and chewing vigorously.

"You don't really think I'm a snow witch, do you?" She doubted he would share food with one.

Through a full mouth, he said, "Ship Mother. No one is mother to a ship."

She sat cross-legged in front of him. She managed to bite into the meat, trying to pretend it wasn't what it was—rather like trying not to think of a monkey, as the old joke went.

She chewed, swallowed. "They wake me, Wolf," she said. "I sleep on the ship over many years. And they wake me in times of trouble. They slow down my body functions with chemicals, so I stay asleep. When I awake, everyone I used to know is older or dead. It's a hard way to live, all in all. But we need someone who remembers the stories of our people, and why we left the earth. And why we journeyed back. I remember the journey's purpose. I keep the fire lit in their hearts, or remind them what the fire

was."

She saw that he had stopped eating and was watching her with that cloudy look of his.

After a pause, he asked, "What was the fire?"

He was waiting. The last of the moon slipped away behind the peaks.

"There was war." She didn't know if the world had war these days, so she explained: "There were great masses of people who killed each other, depending on whose side you were on. Or what race you were. We were—we are—a race of gypsies. In the time before we left earth, there was a great sickness that swept a land called Europe, and the People of the Road were blamed, because we went from place to place, and we didn't die of it.

"My parents sent me to safety, to study in a land called America, because I was good at studies. Then my parents died, and when I came home to bury them, I found the truth about how the world treated us. My gypsy people were exhausted and bitter, so we left. In the ship." It was too long a story to tell in one night. Once you started to tell, what could you leave out?

Oddly, she found herself wanting to tell him. It had been a long time since she'd had a friend—if Wolf could be consid-ered such. There was never time in her patchwork life for a friend—there was barely time for lovers, although they were easier to find.

She looked over at Wolf, wondering if he could be a friend, or if she was just desperate.

He sat very still and silent. Perhaps he was sorry he had asked about fire.

"They even killed the children," she said.

He nodded, as though he knew how war could be. But how could he know, in this land of rats and Ice?

"And worse," she whispered. "Worse."

In a low voice he said, "The fire," nodding again.

The dried rat meat lay in her hand, and her belly churned, festering with words. She closed her eyes. Wolf's quietness opened a space for her words. They started to come.

"I arrived at the camps to help the living. They thought I might know what to do. I was a counselor, and there were chil-dren in the cells, children who couldn't just walk out, after what had happened to them. We opened the cell doors, but the little ones stayed inside. It was all they knew, by the time we got there.

"The women who were raped in the camps, we gathered them up and tried to help them. Many went on the ship with me. But these children didn't go. They were... gone, some-how. We tried to reach them. But they went deep inside, their only hiding place. Most never found their way out again."

She opened her eyes, finding that Wolf was still gazing at her. "Many sold themselves for sex. They ran away to live in the streets. When we brought them back to families that would have loved them, they ran away again, selling themselves for a piece of bread. That was the worst thing I ever saw, that their abusers had taught them to abuse themselves." She finished by saying, "So when each generation in turn asks, why did we leave earth, I tell them."

"Ship Mother," came Wolf's voice in the darkness. "You tell the stories."

She nodded, out of words.

"It's a good name," he said.

Behind him, a glow burned on the horizon. It wasn't the moon. Wrong direction.

Noting Zoya's gaze, Wolf said: "Error's Rock." After a moment he continued, "Zeros think it's sacred, but it's only a mountain of Ice."

"It burns," Zoya murmured, staring.

"The rock is large. Zeros go there to get truth. What they get is death. The starving death, the rat death. The snow-witch death."

Apparently he thought that was a proper note on which to end their conversation, and, turning, he shuffled off to the sled, where he preferred to bunk.

His voice came back to her: "Sleep now, Ship Mother."

Eventually, she would. But nothing, not even the dour Wolf, could spoil a fine evening with a good crop of stars overhead. Yes, sleep could wait.



Anatolly bowed his head. "Bless me, Father, for I have sinned."

The confessional booth was polished wood, carved with loving care out of rare mahogany. It was a special contribution to the Ship from Pope Innocent XIV himself. The entire chapel was a place of peace and comfort. Anatolly wondered when it was that he had stopped going there for spiritual sustenance.

"My last confession was... long ago. Father, I am in jeop-ardy." He should have said we. We all are. But this confession was for him, and he sorely needed it. "For my soul."

When Anatolly paused, Father Donicetti's voice came from very close to the window between them. "Our Savior is capable of all things, my son."

Anatolly basically liked Father Donicetti. The Father was vastly learned, more tolerant than many preferred him to be, and capable of surprise and innovation. Not bad for a 250-year-old AI unit. Donicetti was a bit of a liberal, with a ten-dency to rabble-rouse around social issues. Some of the crew didn't think it sat well on a priest.

"My soul... doubts, Father. I doubt my faith."

"Even our Lord endured the arid lands of doubt."

"Yes, but... But it's worse than just doubt, Father. I de-spair."

The requisite pause ensued, at this revelation of deep sin. "Go on," Father said, his voice carefully neutral.

He had to credit the Father for his tact. Donicetti was cer-tainly not going to accept despair, but he would let Anatolly unburden himself. The Vatican committee that designed the Priest in Space program judged that a certain flexibility might be needed, given the unique stresses the ship's population would encounter. Early on they had discarded the idea of rais-ing up priests from the ship population over the generations. With the ship eventually out of contact with the Holy See, the-ological drift could distort Church doctrine out of recognition. And since Church authority was eroding at home from all sides, this ship, at least, would be an oasis of orthodoxy. The virtue of the AI program was that it wouldn't drift, but stay an-chored to twenty-second-century Vatican III.

"Father, the Church is gone. The papacy, the liturgy, every-thing. We came back to earth, and it was all gone."

"The Church is eternal, my son. It lives in the hearts of those who believe, whatever befalls its institutions."

Anatolly whispered, "Yes, as you say, Father. But it wasn't *supposed* to abandon us. The Church was built upon a Rock. Nothing is as it used to be." He wasn't expressing himself well. It was just falling out of him, all the doubt and pain.

"The papacy is gone, you say?"

They should have updated Donicetti, but there was so much going on. "Sorry, Father. We've had reports. So, it looks like it, yes."

"That is a grave circumstance."

Anatolly came out of his own concerns for a moment to wonder if the Vatican had programmed in a contingency such as this one. They knew the ship would be gone so long that even inconceivable changes might befall the Church.

Donicetti was surprisingly calm about all this. Maybe he didn't like to admit failure himself. The priest had been an out-spoken advocate of the return home, that painful decision that nearly broke the Rom in two—that even after two hundred years, could still inspire flashes of temper. Especially now...

He wanted the priest to acknowledge their woes, to really listen, to really comfort him. "The earth is dying under terrible fields of crystal. Babies abort in the womb..."

"Abort?"

Wrong word. Donicetti knew their problems on that score. Why was he being so pedantic? "Spontaneously, Father. People are despondent. Tereza Bertak was hospitalized."

"Tereza is much better now."

"But depressed, like so many of us."

"I wouldn't call her depressed. But what about you?"

Yes, what about him? He'd been intent on setting an exam-ple. Confident, optimistic, determined. It was a good show. But when he looked at the view of earth—of what it was, and what it was fast becoming—he was afraid.

"It's not just Ice, Father. It's..." Anatolly struggled to find the heart of it. "It's that even below Ice, the land is ruined. Even what's still Ice-free is deadened. Because of the dark field."

"I've heard of this dark visitation."

Anatolly whispered, "It's as though God is trying to kill us."

"If God calls us, my son, we will go."

"Yes, Father, but then why struggle, why carel"

"Because we love His creation. But we do not see the whole of His creation, only through a glass

darkly."

Father spoke of heaven, of course, but Anatolly thought of

Vlad's other dimensions. They were like fish who couldn't see, couldn't even imagine, the airy world above...

Anatolly's voice broke. "Why is Ice growing, Father? It needn't have stayed."

"Evil is always with us, Anatolly."

"But Ice began as a defense..."

"Even Satan began as an angel." His tone grew darker. "A fall from grace."

Anatolly didn't like the direction of this talk. *A jail from grace*. That was *him*, of course. Was that what Father was trying to say?

"My faith is deserting me. Help me, Father."

"My son, God is eternal, as is His Church. The earth may not endure, nor any of its creatures, but still the Church lives. It lives here, on this ship, if nowhere else. And you are the ship's leader, and must resolve to uphold the Church in the eyes of those you command."

Anatolly looked up from staring at his shoes. Was the priest chastising him just when he had made himself most vulnerable?

"Therefore, you must be strong, my son. Accept God's power and mercy to forgive you, to love you, though you do not love yourself."

"I don't?"

"No, my son."

Anatolly had never thought about whether he loved himself or not. It didn't seem relevant. He could see why some people didn't like the ship's priest. And with a name like *Donicetti*. Crew always suspected that was the name of the chief Vatican programmer, but Rome wouldn't say.

"Be a ship captain, Anatolly Razo."

Anatolly frowned at this change of focus. What he wanted was his faith back. Wasn't that Donicetti's job?

"I am a ship captain," Anatolly said with some irritation.

"No, my son, you are not." Now the priest sounded less kindly. He had put on that priestly voice of authority. The Vatican committee made sure they got *that* part down.

"Not?" came Anatolly's high-pitched protest.

"If you were, would your crew be having meetings with-out you?"

"Meetings?"

"Secret meetings."

Anatolly wiped his hands on his uniform pants. Meetings? What was the priest saying? "Who is meeting?"

"That's my point, my son. You don't know. And you should."

God's Blood, what was all this about meetings? Didn't peo-ple meet on board his ship every day without permission? Talking and arguing was a way of life for them. But still... "When did people meet?"

"Right now. And other times."

"People can meet, you know, Father. It doesn't have to be mutiny." Even as he said *mutiny*, his chest stung with a needle of anxiety.

"You delegate too much to Janos Bertak."

"He's my first mate!" Anatolly blurted out in mounting exas-peration.

"One devoutly hopes so. But, my son, you've taken the Lord's lesson of humility too far. It's not our Savior's teaching that we hold back from the work that the world delivers to our hands. We must seize it, for God has entrusted you with His holy Ship and all the souls on board."

"I thought souls were *your* business." Anatolly winced at his rudeness to the priest, but the lecture was insufferable.

"They are, my son. And your business is to keep order so that Holy Mother Church can do her work unimpeded. The work of souls. Therefore, be a captain of souls, my son. Go forth and captain this ship, in the name of our Lord."

There was some truth to what the priest was saying. The crew liked a strong leader—except when they didn't. And it was also true that Janos intimidated him. Janos had the crew's hearts, and that intimidated him too.

"About that woman, though," the priest was saying.

"Woman?"

"Solange Arnaud." The priest's tone was acid.

So Donicetti had heard about her. Well, good. Anatolly hadn't been looking forward to broaching *that* subject.

"She must be accorded no privileges or titles."

"No, Father. Of course not."

"It's a grave error to call her mother superior, or sister."

Christ's Blood, what difference did it make what they called her, amid all their other problems?

"She is an enemy of the Church. Your enemy, Anatolly."

"Yes, Father." Now, add to his long list of worries, *Church or-thodoxy*.

The confessional booth felt too close and tight. He was eager to leave. Yet he wanted to ask, *Have 1 fallen from grace*?

Father Donicetti was intoning, "As penance, thirty Hail Marys, and ten Our Fathers."

Annoyingly, he slipped in, "And tell Janos Bertak to behave himself. Tell him in front of the staff."

Anatolly swallowed, but lacking spit, his throat clamped shut. "Thank you, Father," he managed to say.

"Go in peace and sin no more."

He went. Father had been firm with him. Had given him an assignment. A stern chat with Janos Bertak was in order. Yes.

It was preferable to the abyssal questions of grace, evil, and Ice.

\_\_\_-J\_\_\_

Swan watched as they stacked the food in front of him, in tins and bags and barrels.

The heaps grew around him, as the men in robes brought up the provisions. Solange had brought with her four brothers, big as mules, and fully as intelligent, to judge by their de-meanor. When the brothers had finished their work, she sent them to wait out of earshot, but within call, as though worried about her personal safety.

Swan thanked her, but she was angry and made no re-sponse.

Her rudeness hardly registered on him, as fine as he felt. Oh, the difference between ailing and robust! His blood almost fizzed in his veins. He could walk for kilometers through core-text, and never tire.

But it came at a price. He had fought with Solange.

He hoped the matter of the sleeping nuns wouldn't come up again. It must have been shocking, when she stumbled upon the situation the previous day. OK, but she didn't realize what it had been like for *him*. He'd been cooped up for days, half-starving, consuming his supplies, but always half-mad with hunger. At the start, he'd smashed the nuns' prisons with the intention of freeing them. But one thing led to another. He couldn't remove the circlets from their necks. They were suffering.

Part of him at the time had stood aside, horrified. Part of him was able to rationalize that decent people in extreme cir-cumstances stooped to cannibalism. The events were well doc-umented.

Of course, in those instances, the victims had been *dead*...

"You're looking better, Swan," she said when they were alone.

Between his fingers he felt the fine wool of his shirt. "Yes, thank you." The clothes she had brought him were a major im-provement.

"Not the clothes," she said. "You are looking better."

"It wouldn't take much," he allowed. He winced, inwardly. It *had* taken much. It took several of her colleagues. Why had she buried them in there? He had asked, but she was in no mood to answer. Instead she had the entrance to the room sealed with polymer matrix, assuring that the remaining sleep-ers had no nightmare awakenings.

Her eyes flickered, but she said evenly, "If I'd known you were starving, I would have brought food earlier."

Something about the simple offer touched him. It had been so long since he'd had any human comfort. "Thank you," he said.

"You have been asleep," she said, still in that soft tone.

"Yes." He had the inclination, for a moment, to talk.

"That's why you command Ice."

He tensed. Her only concern was for Ice. It was ludicrous for him to imagine it would be anything else.

Veering away from the topic, she said, "Your accent..."

"Danish."

She smiled. Her face was handsome when she wasn't frown-ing. "After all this time, the accent remains."

"It all remains," he said, surprised at himself. His memories were all intact, reconstituted body or not. He pushed away the sudden emotions, aware that he was visited by profound men-tal swings. Ice must adjust that, eventually.

She was quiet then, as though sensing the topic was too per-sonal. Swan had forgotten the subtle interplay of conversation, how much was held in the silences, how tone painted the words. He wanted to talk to her. But he could never trust her. It was the dilemma of too much power.

Perhaps sometime they would get to know each other bet-ter. For now, there was business.

He took a seat on a bag of food pellets, so that he wasn't towering over her. "The ship," he said. The ships crew was in-dustrious. They had set up a permanent camp in an Ice-free lo-cale, and wrestled with encryption. Jiggling the locked door. "Your progress is slow, Solange."

"We have time to do it right, I hope."

"What's right about slow?"

"I'm making friends. That takes time."

"Perhaps you would do better to make friends with the cap-tain than his first mate."

"The captain is too limited. No imagination. Janos Bertak, though, is a different sort."

"Ambitious?" Swan thought how basic most people were.

"It's not that simple. There's his wife. She wants a child."

Curious, Swan sat back, letting her report.

"There hasn't been a live birth on that ship for nineteen years. They want children, and normalcy. Many of them would be happy to get a family and never see that ship again." She spoke earnestly, as though their predicament mattered to her. He could see that she might indeed win people over, as she liked to say.

She went on, "I've promised them a number of young chil-dren. Most want babies. I don't have any infants. It will take a few days to accumulate them."

Time. She seemed to think there was enough of it. Swan said, "Work as fast as you can, then. The ship, as you point out, is also working fast. They're worried about Ice."

"Do they have the know-how to access Ice?"

She *would* wonder that. "I hope not," he said. "Find out what you can, Solange. So far, they haven't got far." Watching her, he realized she would be eager not to need him anymore.

Solange went on, "This ship representative, Zoya Kundara, is still two days away from my Keep. We do have time for all our plans."

He paused. "Zoya Kundara is her name?"

"They call her Ship Mother. The ship psychologist."

Kundara. Zoya Kundara... the name sounded familiar. He hadn't heard, or hadn't paid attention, to her last name. An un-usual name. How odd that any name from that ship would be known to him.

"My people report that she can be disruptive. I find others from the ship more respectful."

"Ship Mother..." His voice trailed off. "They call her that?"

"It's a strategy for providing continuity and what they think of as traditional..."

He interrupted. "What kind of strategy?"

"A biological stasis. Deep sleep, waking as needed over gen-erations."

A gate opened in memory. "Star Road" he murmured. His voice sounded like it was coming from a long way away.

He rose from his seat. Reacting, she stepped back.

Closing his eyes, he concentrated. There was a ship, a fa-mous ship. *Star Road*. Long before his time. One hundred fifty years earlier than his own historical time, a ship had left... He groaned. It was a louder sound than he intended, and he heard the rustle of the nun's robes behind him. She had moved a dis-tance away from him.

His size frightened her. He didn't want to agitate her, but his own emotions were whipping inside him. Hard to control. A sense of dread rose inside, like a memory that had found a pipe. Memory, that swelled beneath the surface, seeking an outlet.

He ran to the wall. Placing a hand to Ice, he called for some history. Oh, to be wrong. He was often wrong about history, not his favorite...

Ice was swift in retrieval. His hand filled with jade green light.

Information flooded in. Yes, that was the ship, the ship with the plague-carriers. To his disgust, his eyes began watering. Liquid flowed down his face. Memories would out.

Solange was talking to him. "Swan? Swan?"

Hand to the wall, he ignored her. More information, con-firmed by Ice. The Rampage had lasted two hundred years. The gypsies had left by his time, but not before harboring the virus, spreading it everywhere. They were chased off the earth. Too late. Too late for him and his family.

The gypsies were back.

There were thousands of them, loaded on that ship. Seeping with infection. Immune themselves, but destroying everything they touched. Turning the streets of Copenhagen to the land of the walking dead.

He walked. He was dead. The pits. Pour them in, pour in his parents. Cover them with soil. He found himself sitting on the floor, sobbing.

Coretext echoed with the terrible sound.

Solange came forward, staying well away, but asking, "Swan, what is it?"

He looked up at her. She was afraid of him, wanting him to be quiet, to be normal. That angered him. He whispered, "Get out."

"But what is it about the ship? Something I should know?"

The tears were finished. He looked up at her, seeing a re-fracted nun, multicolored, through prisms of liquid. She was monstrous. "Get out," he repeated.

When she hesitated, he charged forward and lifted a sack of food, hurling it against the stacked cans, sending them rolling across the floor. She wanted meaning. He'd give her *meaning*. Take the ship and kill it. There's meaning for you. Someone was roaring. His throat hurt. He ripped bags of food open, spilling their guts.

The nun was staggering back from him, her mules clustered around her.

One of them came forward with a large stick.

"No!" she ordered. "Let him be."

Swan was breathing heavily. He looked around him. The fit had passed.

"We'll take that ship," he said, voice shredded.

"Of course we will." By the look on his face, Solange de-cided to say no more. Then she and her mules fled. Down the long stairs, into the tunnel.

He was exhausted.

Both exhausted and on fire. He spun around. What to do? He hurried to his den, grabbing a stuff sack. Into it he began packing things. Warm clothes, food. But not cans, too heavy. OK, packets then. No, too bulky. He emptied the sack again and stuffed in bottles of water. He'd have to travel light to climb the crevasse. Food could be found on the surface, one way or another.

He set out down the corridors of coretext, immediately, be-fore he lost his resolve. All along he'd thought the earth was clean and safe, it was part of what he liked about Ice.

This Zoya Kundara wasn't clean and safe.

She shouldn't have come back.

#### **CHAPTER TEN**

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At first Zoya thought that there was blood on the snow. They had entered an array of information stacks—what Wolf said was the Taga. He slowed their pace, maneuvering around jum-bled outcroppings of crystal facets—like the undergrowth of a crystal forest. There, in the shadows of the pale obelisks, crim-son stains followed seams in the Ice.

Dismounting from the sled for a closer look, she identified it as red algae, possibly *Chlamydomonas nivalis*. Lieutenant Mirran had already reported on finding this genus as well as its green cousin, *Chloromonas*.

Zoya bent down to scoop up a handful of pinkish snow. Somehow, in this sun-blasted landscape, the chemistry suited blooms of algae, especially in crevasses or crystal palisades af-fording some shade. They had exploited the niche, migrating during relatively moist times from several meters below the surface to ripen in any slush brought on by rare precipitation or dew.

Queen Ria's tears, Wolf had named the streaks. Blood tears, for her exiled child.

It was a sweet fancy, turned sour when they found the first bodies in the snow.

Two young children lay wrapped in a blanket. Pitifully thin, they were intact, as though sleeping.

"Starved," Wolf had said.

Later they found three other bodies, along a trail formed by many sleds.

"The pack will come to feed," Wolf muttered. "The Taga hides them."

As they drove on, Wolf shared with her his surmise that a whole preserve was on the move. "Heading to Ancou preserve. Hoping to get in." He added, "Ancou won't take them. Too poor."

"Why are they traveling?" Zoya asked.

"Food bender, usually." he answered. Food bender—the chemical plant that converted recycled cellulose to edible car-bohydrates. The heart of any preserve, Wolf had said. "Maybe it broke." Nostrils flaring, he put his head up, into the stiffening wind.

They topped a hill, and Wolf pulled to a stop. Below them lay a vast forest of crystal stacks—her first full view of the Taga. Far off, their ranks closed, like an army barring the way. In the day's bleached light, the formations were colorless, with no vis-itations of color. It was a dead forest—or perhaps a resting one.

In a small clearing below, a caravan of sleds could be seen winding into the forest. Two of the caravan's sleds were sepa-rated from the train, leaving a small knot of people behind.

"They're dropping sleds now," Wolf said. "Less weight, more speed."

But he was distracted by something else. He jumped down to the ground and walked off a few paces, kneeling to inspect a dropping of scat. He prodded at it with his knife.

"Something?" Zoya asked.

He stood up. "Yes." He was quick to start the sled up again, and they lurched down the embankment into the valley.

"I have food to share," Zoya said. "I'm willing to part with some supplies."

As they approached the two sleds, it was clear they were lay-ing out a body, wrapping it in blankets.

They came abreast of the sleds, and passed them.

"Wolf, I want to stop," she told him. But Wolf wasn't inter-ested in the sleds.

"No time to trade," he said.

"We're not going to trade, we're going to help."

They were moving up on the main caravan. It was doggedly plowing through the valley at a pace that suggested their sled batteries might be low.

Wolf turned to regard her. His eyes had hardened to frost. "A bad trade, to give things away."

Zoya muttered an imprecation at him in her tongue. Her ear lex whispered the translation, but she didn't repeat it. Wolf knew he'd been insulted. "You have no pity," she said.

"Pity can kill you on Ice."

Whatever made her think the man had a heart? He was a bounty hunter, a cold-blooded broker of goods...

The caravan occupants watched as the smaller sled passed them. They had the remote, dazed look of people who ex-pected no succor. Nor would they have any from Wolf.

She twisted around to look as they passed the lead sled. Wolf had no intention of stopping. "Please, Wolf," she said, get-ting to her feet and swaying in the bounce of the vehicle.

There was no getting through to him. Worse, he was chang-ing direction, peeling off to the west.

"That's the wrong direction," Zoya said.

They jolted along, leaving the caravan farther behind, leav-ing their true course behind.

In her frustration, Zoya grabbed hold of the steering wheel. Wolf turned on her, but instead of anger, she saw an expression of what might be pain, or fear.

"A snow witch," he said. "Fresh sign."

She locked gazes with him. "Snow Angel, then?"

He nodded. "Maybe."

If there was a lone witch, they could travel forever and never find him. Wolf was well aware she was in a hurry. She'd told him why. He'd responded that if speed was important, she would be traveling in a spaceship, not a sled. To that logic, she had no answer, except Janos, Janos. Damn him for a meddling conniver.

She looked behind her, southward. Toward the Keep. Anatolly had said the nuns didn't see Ice as a problem, but rather as a resource. If so, were the nuns involved with Ice's re-newed growth? Was it their *intention* that it stay, and stay? She was most eager to meet this leader of secular nuns, this Solange Arnaud. But no, they would chase phantoms, instead.

Over the whine of the engine she growled at Wolf, "I paid you."

"Not enough," she heard him say.

He pressed the accelerator to the floor, and they sped through the translucent forest, lacking trails or landmarks. But Wolf seemed to know exactly where he was going.

The slippered feet of the postulants set up a rhythmic thud-ding as they walked in double file down the great hall of the Keep. In their midst, Kellian wore a dun-colored robe. Hands tucked in sleeves, eyes downcast. *Contemplation, detachment, obedience*. After two days of instruction from the Sisters of Clarity, Kellian knew the litany. She could mouth it with the best of them. And like them, she had lost her hair to the zeal-ous nun barber. Without it, she felt curiously undressed, de-spite the long robe.

"The sanctuary," whispered Nit, next to her.

They were passing an arched doorway, carved from un-thinkably precious marble. From inside came the gleam of stained glass.

"It's *the best place to sleep*," Nit said, her voice barely audible, her lips not moving, a trick Kellian was practicing herself. Nit suppressed a guilty smile. One did not sleep during instruction, when the nuns were droning on about Ultimate Meaning.

The wooden floor glowed, polished from hundreds of years of slippered feet. Light washed down on them from chandeliers of glass and gold. Glass, gold, wood, marble. The sheer won-der of such materials was enough to quell wayward thoughts. This was the fabled Zoft of the Ice Nuns, mysterious, elegant, final. No one who left the preserves to serve the nuns ever re-turned. So when Kellian said good-bye to her parents, it was forever, a weight that she felt keenly in her chest. It would dis-solve in time—with contemplation, detachment, obedience. So the nuns said.

"The Hall *of Horrors*," came Nit's puff of a voice. They passed the gallery displaying humanity's inhumanity, the very reason why the Sisters of Clarity existed. "*Mother Superior doesn't ap-prove*, '' Nit said.

"Why?"

"Horrors are not uplifting. But I go there lots."

Kellian suppressed her own smile. She liked this Nit, who could not be called Nita because she was an inny.

Shhh! Came from behind them. Jace brought up the rear. One of Hilde's gang.

From the opposite direction walked a figure dressed in a dark brown robe. Hooded. Kellian's stare received a sharp el-bow from Nit.

It was a brother. Only brothers had cowls. Eyes down, hands in sleeves. Kellian had never seen a man in a dress be-fore. She wondered what he wore under it. Well, if the brothers were off-limits—and they were—she might have to take a rather large dose of that detachment the sisters were so eager to hand out.

She and Nit had been cleaning the latrine—again—when the subject of the brothers first came up.

"They don't have much capacity," Nit had whispered. "Sex and power, that's what men want. Even the Eco men made a waste of things, going after sex and power. Go see the Hall of Horrors if you don't believe me."

"But the nuns brought men to the Zoft."

"With proper training they do all right. Some are capable, and make contributions to our discipline. We

don't despise them just because they're men."

"That's open-minded."

"Yes," Nit said, missing the irony. "Plus," she went on, "they'd defend us with their lives."

Yes, against the Zeros. The preserves always coveted the nuns' technology, but were no real threat to the Keep. Distance and apathy were strong deterrents to conquest. But if they real-ized how little the nuns' goals resembled their own, the Zeros might eye the nuns differently. For the Sisters of Clarity, Kellian now knew, had no intention of helping the preserves mine through Ice. For starters, they couldn't access Ice's programs any more than the Zeros. And if they could, it wouldn't be to dissolve Ice.

*The Zeros.* As though she hadn't been one herself until a short while ago. Thanks to a barrage of instruction, Kellian was losing her previous self. Different clothes, different customs, different thoughts. Sister Gretchen and Sister Roselyn enlight-ened her daily, almost hourly, on the precepts of the order. Meaning without faith, social cohesion without worship.

Well, she was still a Zero in one respect: she didn't give a wad of spit for philosophy. Even while saying, *Yes, Sister*.

The discrepancy between the image of the nuns and their reality made Kellian uneasy. But politics was not her passion; it was science, research. It was why she was there. Her mother's words hovered for a moment: *You lie down with rats*, *you rise up with fleas*. Kellian felt an itch. Perhaps it was the scratch of the wool robe.

The troop of postulants turned into the great rotunda, where the west and east wings met. They had just come from the postulant and services wing in the east. Across the marble expanse of the hall lay the arch into the west wing, the quarters of the nuns.

Nit was urging Kellian to look off to the left. "That's it," Nit muttered low.

Kellian followed Nit's gaze to the side, to great wooden doors, thirty meters high. Brothers were opening the porthole to the north wing. There was the third wing that Kellian had heard of, the wing that plunged back, deep into the shelf of Ice.

Sister Patricia Margaret Logue was waiting for them. Her hand rested on the ornate cane Kellian had seen before. Tap, tap, went her fingers. They were three minutes late. Hilde, chas-tened, assembled her charges before the sister.

Around them, the walls of Ice revealed a frozen ocean of startling clarity. In the great depth and weight of Ice there, no air at all occluded the molecular interstices.

Nuns were already huddled over their opto-electronic com-puters, working, working. Had they arisen even before the early-dawn rousting of the postulants?

Ignoring the workers, Sister Patricia Margaret fixed Hilde's troop with a baleful eye.

"I had a fine talk planned, but sadly, we have no time for that now."

Nit had warned Kellian that sister would give a speech in honor of the newcomer among them.

"Here's the short of it, my girls, so try to pay attention. We're behind schedule. We've just lost another node to Sister Helena. It will be cramped in this gallery for a while until I rattle some cages to get more space."

"We never have enough space," Nit whispered.

Sister Patricia Margaret pounced. "Nita, my dear, would you care to give my speech for me?"

Nit fairly imploded. "No, Sister, forgive me."

Sister had already turned from the offending Nit. "I needn't re-mind you, but I'll say for the sake of our new postulant, Kellian Bourassa, that our little enterprise is—underappreciated. Why?"

She adopted a tone of high irony. "Because we fly in the face of all the work done in north wing. Our position—a highly of-fensive one—is that all the so-called *data retrieval* the Sisters of Clarity have ever achieved is nothing of the sort. Our group's hypothesis is that we have never cracked the least part of Ice's encryption. That being the notion, what is it, exactly, that we have gleaned from Ice, the fragments, the intriguing partials? Girls?"

"Signals," came the chorus from the postulants.

"So then, Ice is programmed with a goal of transmitting sig-nals. For what purpose?"

"A purpose we must discover," came the unison reply.

"And why is this harmless idea so despised in the glorious north wing?" Sister Patricia Margaret's eyes darted from one postulant to the other, ready to swoop.

Tapping on the head of her cane, the old nun gave them plenty of time to display their ignorance. Then she muttered under her breath and shook her head. "No answer? Just as well. You are obedient, as is only proper." She looked in the direction of the other galleries in the long hall of the north wing. "Envy is the enemy of inquiry. Remember that, my girls."

"Now to work." The cane thumped on the floor, and Hilde stepped forward to marshal her charges.

The sister held up her hand. "One last thing. Most of you are here as apprentices, to serve the sisters. Hilde, as your se-nior, has her team, of course. In addition, I am giving Kellian some time on one of our nodes. I have an interest in her ap-proach."

Hilde stopped still. "But Sister, she doesn't know how we do things here."

"Exactly," Sister Patricia Margaret said. "Sometimes you need to crash around a little, make a mess, to find something new."

She turned a shrewd gaze on Kellian. "But not *too much* of a mess, mark me, girl."



Solange watched Sister Patricia Margaret stalk off after a most unsatisfactory meeting. She heard the thunk, thunk of the woman's cane as the nun made rather more noise than was nec-essary, leaving the audience with her mother superior.

Solange admitted she might have exercised poor judgment, sending Sister Verna on a mission, given how close the two women were. Events pressed in on her: Swan's disappearance, Zoya Kundara's mission, Janos Bertak's maneuvers. Weary, and sleepless as she was, mistakes might creep in. Perhaps it was time for Sister Patricia Margaret herself to leave... she was long past her usefulness. But the sister was very well liked, de-spite her ascerbic manner, of which Solange had just had a taste.

She looked out her narrow window, expecting to see the tracker's sled hove into view. It was too soon

to expect Wolf and his passenger, though.

The white plains remained empty, an emptiness some saw as *clean*, and others as *bleak*. Out of respect for Ice, it was custom-ary to pronounce it *grand*. There was always a tension in the order regarding the capacity of Ice—to accord it respect, but not too *much* respect. Even the Sisters of Clarity were suscepti-ble to bouts of awe and irrational belief. The order was vigilant over such weakness. Ice, it must be remembered, had no *pur-pose*. It was a logic device. Still, the dilemma was, why after all these millennia, did Ice still grow? Had it designed a new pur-pose? That way lay error. One must not ascribe purpose to Ice. Not yet.

Her view stretched all the way to the crumpled towers of Seetol. It was not a pleasant vista. In fifty years, since she first took her vows, Solange hadn't stepped onto Ice. She had al-ways felt blotted out by Ice, especially by this damnable view. The distant ruins showed what Ice could do at the macro level: crush, destroy, obliterate. Here was the great duality of quasi-crystal: destruction and creation, outer and inner.

Now there was a man of Ice named Swan. What was he? A freak, a madman, a cannibal. How was he framed so mis-shapen? Since he said that he had slept in Ice, was it Ice, then, that had altered him? Or his own perversion?

Looking out windows was a bad business. She turned away from the view, from such useless speculation.

Swan was gone. Gone to the surface, the brothers told her. Though monstrous, the man was fragile. He could hardly sur-vive without transport, secure transport. Perhaps, in his unrav-eling state of mind, he was intent on self-destruction. His death would bury his secrets, and so many of her hopes. All her hopes, if truth be told.

It was time for her call from the ship.

Solange smoothed her hair, though Janos wouldn't be look-ing at a visual. She consulted her scroll, readying her report. So far, twelve children, two of them infants. Sister Loselle was even now speeding south to Koma preserve, with four lesser ones along the way.

She sat on her divan, waiting for the radio transmission.

The window slit blinked at her as a cloud passed over the sun, and departed. She went back to the window and pulled the drapes.

A muted darkness. Better.

The transmitter squawked. "Sisters of Clarity, radio check, over."

She leaned in to speak. "I hear you. This is Mother Superior. Who is this?"

"Who do you think? It's Janos Bertak. Expecting someone else?"

"I was hoping it was you. Certainly there are other possibili-ties." She must remind Janos that he wasn't master of the ship yet.

"He's not a possibility. He's not in the line of information any-more."

"So you will demand an election?"

"Now? I could, if I wanted to. But I'll wait. He's likely to be a sen-timental favorite. It would help if you could deliver your end of things."

It stung, that business of her *end of things*. She mustered de-tachment. "I have fourteen children. More in a few days."

"How long?"

"Four days, perhaps five," she answered.

"I'll plan to receive them from you nearAncou preserve. Then I'll be in a better position up here. Don't call me, I'll transmit when it's safe."

"Still wary of Anatolly Razo?"

"Of course I'm wary of him. He's the captain. How many, by the way?"

"How many what?"

"Children. How many will you haveT'

"Thirty, let's say."

"Make sure it is, then" he said. "Any sign ojZoya?"

"No." She was on a *sled*; with any luck she'd still be plowing through the Taga. All for the sake of the nuns' anxieties about military transport in their airspace. Truly, Anatolly was a joy to work with. Zoya, on the other hand, might not be so amenable, "janos, I have some concern about this Ship Mother of yours."

"Don't be concerned. She's irrelevant now."

"Nevertheless, I don't like to walk into a situation blind. Send me information about her. About Zoya personally. I would like to know who I will be facing—beforehand."

"Nervous about dealing with her?"

Solange let him think so. "I want to be sure I have the upper hand. I will require some background. Her role as Ship Mother. So unusual."

"So unnecessary."

"But I do insist."

He signed off, after agreeing. He could hardly refuse. Solange had warned him she would be making demands on him. For technology, for example. So far she'd asked little, but he should get used to acquiescing.

The radio hissed with interference, but Anatolly's attitude came through clearly enough. *No*, was his attitude.

"I am way off course, Anatolly." They had left behind the endless formations of the Taga and were headed into flat, fea-tureless plain. They were still in the former Puget Sound, but in the west the Paz awaited: a wind-blasted steppe of unimagin-able extent.

His response came: "The man may come around. Give him some rein."

Zoya looked over at her bearded companion single-mindedly building a makeshift bridge over a crack in Ice. *Single-minded* was the right description. *Coming around* was not.

"He won't come around, Tolly. He's obsessed with this snow witch, this Snow Angel. It's a wild-goose chase."

"A wild goose?" The static wasn't helping. Constant electro-magnetic surges from Ice churned words into squawks and hisses.

"Goose chase. But never mind." Anatolly had never seen a live goose. Never imagined scampering into the woods after a creature that could outrun you and peck you to death if you caught it.

At the mention of Snow Angel, Wolf looked up, as though he had learned to recognize the name when spoken in Zoya's tongue.

She continued to press her point: "Have a shuttle deposit me out of sight of the Keep. I'll walk the rest of the way."

"We've been over that already. Please, Zoya."

She took a calming breath. Pushing head-on was not work-ing. Beset by many troubles, Anatolly was closing up, pushing people away. She softened her tone. "It's cold out here," she said. "Sometimes the winds blow hard down the Val Paz."

"Val Paz?"

"Their term for between the mountains. I miss the old names."

"You sound lonely," Anatolly said.

That was a fine opening to presume on their friendship. She well knew it had been more than friendship to him. And for her—well, no point in love between the sleeps. But that wasn't true. She had been very fond of Anatolly. It might have been more, eventually. But when you are Ship Mother, eventually never comes.

The radio crackled like memory misfiring.

There were things she could say to him that might win her a favor or two. Crossly, she rose above them. "Nonsense, Tolly. I'm not lonely, just in a hurry. You gave me a job, now help me do it."

His tone was captainish again. "I've made my decision, Zoya."

She stared at the transmitter, hating the little box. Their af-fair was long over for Anatolly The fact that it was only two weeks ago for Zoya was beside the point. She must learn to keep track of time differently, it would make her life so much simpler.

"What does Janos counsel you?"

"Why does everyone worry about Jams!" Anatolly blurted out. ~l make my own decisions."

"It's a bad one, then. He's against me, Anatolly."

"Janos is not against you, nor against me. He's smoothing things out with crew. They mutter against me, Zoya. They want to be off Ship."

"To go where? We may have nothing left to live off, at the rate Ice is growing."

His exasperation cut through the static. "Don't lecture me. I know how fast it's growing. Ice is accelerating, Zoya. We thought we had three months. We don't. It's down to half that."

"Half?"

"Yes, six weeks, we're projecting, seven at the most. That's for a thin layer of Ice. We don't know what the effects will be on the soils. People are scared up here, Zoya, and so everyone has a strategy. I'm ared of factions arguing for this and that solution. Someone has to xad, and that will be me."

Humbled, she responded, "Yes, Anatolly."

Perhaps her obedience softened him, because he said, "Zoya, you're close to the Keep, it may still work out. But if your man doesn't turn around tomorrow, I'll send the shuttle, no matter whatjanos says."

So it was Janos. "That man is poison."

"He's my first mate.11

"I don't think so, Tolly. Watch your back."

The radio sputtered: "Please don't call me Tolly."

"Yes, Captain," she said. Now he had given ground about the shuttle, she mustn't ruin things. She signed off before he changed his mind.

Wolf was waiting for her with that stolid, what's-taking-you-so-long look. He needed her to help push the sled over the bridge, over a lip of Ice, where the heaving of the underlying earth had extruded a shattered ridge of crystal. In the tundra around them, it was a singular feature, and one that required a bridge or hours of detour. Wolf said the spikes on the traction drum couldn't grip on the smooth polymer sheets of the bridge.

She considered refusing to push the sled. West was the wrong direction. But she surmised Wolf would win the face-off. She wouldn't get far on foot.

He had uncoupled the two sections. They began with the forward sled, with Wolf hauling from the front, Zoya pushing from behind. The sled runners grated laboriously over the plat-form.

"Push harder," Wolf called out.

"I... already... am."

The sled lurched another centimeter or two.

Eventually they managed to push it across the gap. Wolf turned to look at the rear section, still on the other side. He tramped across the bridge, and, sensing she had remained be-hind, turned to regard her.

They stared at each other across the crevasse.

"Why should I?" she said, standing her ground.

"Sooner push, sooner back on track."

"But whose track? Yours or mine? We traded you plenty for this trip, and now you're going back on the deal. Wolf, you know I'm in a hurry. You've had years to track your witches, and I'm running out of time. You don't care; all you want is for me to push the damn sled and shut up."

He was silent, looking at her. Damn his silence anyway. "I'm tired, and I'm hungry," she proclaimed, letting out all of her grievances in no particular order.

He walked closer to the edge of the fracture. "Anything else?"

"Yes, I'm cold."

He nodded. "Your talk with the ship didn't go well."

"No, it didn't. It didn't go well at all." She stepped closer to the crevasse to face off with him. "Nobody listens to me. I have a man on that ship who wants me to fail, who works against me at every turn. The crew expected to come home and plant corn and have babies." She waved her hand around her. "We got this instead. We're tired and scared. The nuns are at least a chance to learn how to survive." She knew she was giving him an earful he didn't want. "I hope you're not too attached to your big Winter here, because if we have anything to say about it, we're going to melt it down and plant some damn corn."

By way of answer, Wolf turned back to the sled, and for one evil moment she considered dashing across the bridge and pushing him into the chasm. But he returned holding a pack. Crossing the bridge, he crouched down and began setting out some food.

He looked up at her. "You said you were hungry."

She watched his lunch preparations, feeling deflated and less listened to than ever. But she was hungry.

As she settled herself opposite Wolf, a deep strumming sound came from far away, like a struck drum.

Wolf looked at the fractured ridge of Ice stretching like a surgical scar north and south out of line of sight. "A restless sleep," he said, referring to Shinua, the boy who slept under the snows.

They set into the rat jerky, a meal she was beginning to pre-fer to tube paste. He let her sit on the supply pack, no doubt his way of mollifying her. She didn't plan on being mollified.

At last he broke the silence. "I'm in a hurry too."

She chewed, staring south.

"Scat," he said.

She checked her ear lex for a translation; it was *animal spoor*.

"Snow Angel has been leaving a trail of scat for me. Lately."

"How do you know it belongs to Snow Angel?"

"She leaves lengths of her hair hidden in the scat, so I'll know her."

"Her?"

He nodded.

"Why would she do that?"

He shrugged. "I want to catch Snow Angel before she changes her mind."

Zoya declined his offer of more rat jerky. She didn't want to listen to his arguments, but his small revelation loomed large and generous from a man who gave so little.

"Why does she want you to catch her?"

He bit off another chunk of jerky, paying close attention to the food, not to her.

"When do we turn around? Tomorrow? Next week?"

He chewed, avoiding her eyes. As long as it takes, was the im-plication.

"Wolf, what's between you and Snow Angel involves two peo-pie. Between the nuns and me, is a whole shipful of people, des-perate to continue their line, desperate for some good news. I'm supposed to guide them. But I'm ignorant. I don't know what Ice is. I don't know anything much that will help my people."

"The Ice Nuns." He spat out a brown wad onto the snow in an unmistakable gesture. "They don't know much either."

"Maybe not. But I'm gathering information as fast as I can. Your stories help, Wolf. I'm piecing everything together of the old stories, the beliefs, the facts. The preserves helped me, and the nuns are also part of the picture. I need everything. And soon."

He bit off another piece of jerky, scanning the barrens, see-ing what an experienced hunter saw, or perhaps the phantoms of his revenge.

"I have more stones," he said through the mouthful.

She stood up, feeling weary. "Good. It looks like I'll have lots of time to hear them."

"My ancestors have stories."

"Fine," she said, "let's get started, and you can tell me on the way."

He remained seated. "There are stories in the old tongue." He glanced at her. "Sacred stories."

"The old tongue? You speak it?"

"No."

Her feet were chilling, and she turned up her socks. Still the man seemed content to sit, though he claimed he was in a hurry.

He tapped the amulet on its leather thong. "I don't know the words. Maybe a few of them. Like I know a few of yours."

The amulet looked like it was made of obsidian. It was carved upon, but hard to see, in the black surface. She sat :own on the pack again, waiting for him to continue.

"It talks," he said, resting his hand on the stone.

His pronouncement floated between them for a moment be-fore she could integrate it. She squinted at the amulet. If it was a piece of technology, it was surely well disguised.

"They are old words. My father told me that they would protect me from the darkness. So I keep them close."

He was serious—not that Wolf ever joked—but he was telling her there was information in the carved rock he clutched in his hand. She waited for him to activate the stone, to turn on the story.

They sat, and she had an ugly intuition. He wasn't going to offer the story, not for free. She strove to keep her voice neutral. "You owe me a story, Wolf."

"You've had stories."

She could hardly believe what he was doing. He led her on, he shut her down. The crevasse was a compelling option.

Wolf was staring at her left ear. At her diamonds.

A prolonged silence reigned.

He was a beast. A mercenary beast of a man, with no capacity for friendship. He lived by bounty hunting, and would die by bounty hunting. The frost in his eyes revealed the pack ice of his heart.

This amulet contained the old language. More stories of Shinua and Ria? And if so, how had such an electronic record survived when all else was lost?

"You want a diamond," she said, her voice like cubes of ice.

"Up to you," he said.

He had the bad grace to look her directly in the eyes as she reached up to her ear and unscrewed the second stone.

She didn't know whether she was glad or disappointed when he took it.

After depositing the stone in the same jacket pocket as the first diamond, he removed his amulet and rested it on his knee.

In all the wide, white plain, there was only the two of them. And between them, only the black, carved pendant. As Zoya watched, he pressed his finger into the back of the amulet, and then the recording that had lain dormant inside began to play.

It was in the old language, as Wolf called it.

It was her language.

## **CHAPTER ELEVEN**

**i**\_

Swan had left the city behind him. Halfway up their crumpled sides, the city's great towers were clasped in Ice's grasp. It had been a dangerous journey, fleeing the surface city with its rem-nant hulks of urban greatness. He had glimpsed a swarm of rats; there were surely more lurking in the ruined city. The pre-serve that had once been there was abandoned. All that was left of the megalopolis of Seattle was his own domain of coretext.

Until he found weapons and a sled, he would not feel quite safe. He was acutely aware that he was

vulnerable in this sur-face world: a stark figure exposed on the albino landscape.

And what a thing this Ice was. He had known it was geo-graphical in extent; he'd imagined it was deep and wide. But, when he emerged from the crevasse and stood up, blinking in the sun, his mind reeled. He turned and turned.

Ice had become the world. It was nothing that could be called a layer, an overlay, a growth. It had seized the land, wrapping mountains in a dominant embrace. It commanded the geography, except for gashes left by mountain chains both east and west, and Mount Rainier in the south. Far away, he knew, the equatorial ocean also remained. Climate control. Ice did maintain things nicely. It was a program goal.

Still, his mind took an hour to come to terms with what he was seeing. He had huddled next to the crevasse and stared around, breathing carefully, evenly. He saw a deep-hued laser light shoot through the land like a crack erupting on a frozen pond. It was a larger pulse than in coretext, altogether more grand.

It was information earned in light, amplified by the orienta-tion of quasi-crystal lattices, which were not true lattices at all... but aperiodic sequences of immense complexity. No one, not even Swan himself, could grasp that pattern. He and his research team had worked with Ice, programming it while still not privy to its quantum mysteries, much as gardeners trained and manipulated plants without comprehending the profound chemical mysteries of photosynthesis.

But now, acclimated to the new world, Swans reverie had subsided. His legs ached from hours of hiking, the skin on his shoulders was bleeding from the weight of his pack. He must continue on. He owed it to the new world flowering around him, to protect it and keep it clean. He didn't hate these gyp-sies, he told himself. They believed themselves innocent, they always justified themselves. What good were words, though, against the testimony of the dead? The flesh spoke, as it fell from bones. *But for you, I would have lived*.

They should have stayed on their road, these vagrants, these wanderers, these killers. Everywhere they went they spread corruption. The worst of it was, they were immune, so the virus never killed its host. A perfect, symbiotic relationship.

It made him slightly ill to think of all they could ruin. At first he'd thought the ship merely threatened Ice. And that was bad enough. Now though, they threatened all life. He wanted some company, after all. One needed some companionship. Solange, for instance. She was interesting, an educated woman. And the Keep was worth... keeping. Even the preserves had their place. He didn't want to be the sole survivor.

He trudged on, following the gypsy woman's path traced in Ice's memory. Zoya Kundara was moving out of the Vancouver area, outward on the tundra that had once been the Strait of Georgia. That was an odd direction. That way lay nothing but the vast Pacific Ice Shelf.

Why had she diverted to that course, just when she'd been heading south, right into his arms?

Gypsies would wander.



I am dying. I don't mind, I'm an old woman, and weary to the bone of all of you.

So began the old words, the words from Wolf's pendant, un-til now merely a carved stone on a leather thong.

Oh Tolav, don't look so confused. I'm making a recording. I know you don't know what that is. That's why I'm doing it, really. Because everything will be lost, you see. Everything is already lost.

All but you, my son.

I'm ashamed of myself that you're not an educated man. But I made my choices. You had to be strong. And respected. The barbar-ians here wouldn't trust a man who could read. So you are tall and robust and fierce when you need to be.

This place stinks. That sums it up. I could be more eloquent, but what's the point? I'm ninety-six years old, and I don't have to pretty things up. I know what we're becoming. In the early years we had a school. Now people burn books for fuel. Why not? They can't read anymore. Who needs to read when there's the control of the food benders to be won? And control of the women—oh yes, let's not for-get sex—and control of daily affairs. I leave such ambitions to the young thugs who covet them so much.

Well, I said I was weary.

Tolav, this is for you. Take this when I've finished and keep it close to you. Pass it on to your strongest son. Tell him to listen to his grandmother.

It's Grandfather's doing that I can record at all. My grandfather worked hard to resurrect the technology, but no one was interested, except for me. Thanks to him, I'm able to make this last recording. Ill try to keep it short.

My parents never cared about learning. But while he lived, my grandfather taught me what he could. He passed on to me what he'd been taught by his father, and so the science and the history has been handed on in our family since the Collapse. To my shame, that tra-dition ends with me. It's a bitter thing to squander knowledge, to keep it inside my worthless old head. So this record is your educa-tion. Keep it alive, Tolav.

The barrens were not always here. Everyone knows that. But not everyone remembers why. Now listen.

It began with dark matter. A kind of a cloud came into the neigh-borhood of our sun. In the old days, people had time to wonder what the universe was made of. They said part of the universe was made of dark matter. It bent light, and so they knew it was out there, but it wasn't supposed to be harmful. Grandfather explained that dark matter wasn't composed of the stuff everything else was made of. They didn't know what it was made of. And this cloud was different in other ways, too. It was deeper and emptier.

Don't frown, Tolav, I know this is hard. What Grandfather told me—and even he was guessing—was that this dark matter si-phoned off information, like a cold room will attract the warmth from your skin. It's the natural flow, Tolav. Entropy.

The world is moving from order to disorder, and someday, they say, the universe will be in a sterile balance. Things fall apart. That was the title of a book I used to have. I hated to watch it burn.

Where was I? Oh, how it all leaked away...

Some information was more vulnerable than others. But biol-ogy—such a miracle of tender persistence] It couldn't hold. Its chem-istry is so temporarily stable. And so information-rich, God help us.

But the Collapse began with the deterioration of electronic

computing (the old machines with the funny little keys). Oh dear, I have to keep this simple, don't I? Just how simple is truly sad. Any-way, information inside the old computing machines—the data— went bad. Electronic information decayed into noise.

With the plants it was slower. The spring crops that year sprouted thin and spindly. Wheat didn't come in at all. The fields were black mud. People lived off the produce set by in the controlled-atmosphere silos. We have the story in our family that one of our an-cestors traded a jeweled watch for a box of fruit—what were called oranges. When they cut into them, there was nothing but white rind all the way through.

The trees—I've told you about trees, remember? Well, the leaves fell off in June, instead of in the fall as they were accustomed to do-ing. There was a famous poem, "The Autumn of June." It was the autumn of our species, Tolav, because in a few short months, even before starvation set in, everyone was sickening. Did you ever think, Tolav, how much information it takes to run a human body?

Well, never mind.

Within six months, it was over. Except for a few outposts, the world had ended. I sometimes wonder what the dark cloud will become with all that new information? Will it re-create what it stole from us, some-where else? If so, perhaps something good may come of all this.

Now listen carefully: the cloud, the cloud of dark matter, is gone.

We're free of it, dear one, and have been for a long time. Grand-father said the effects waned in about two hundred years, just as sci-entists had said. The cloud moved on to more lush feeding grounds. Poor bastards, any neighbors we might have!

But we're still afraid of leaving our caves. Personally, I think our king of the refuse heap wants to prevent people from leaving and de-priving him of his slave labor. Don't befooled. And don't be afraid, Tolav. There is more darkness in this dreadful warren than the scoured world topside.

I do have to finish. Here is what you must know about the bar-rens. You call it Ice. It's not, you know, but the name will serve.

I've told you before what Ice is, and how it began. Right here at the Seattle preserve was a major research center. It once was a great city on a fine harbor with sailing ships and airships and two million people. They all died except for a jew. Our ancestors survived be-cause they were researching on Ice. They grew Ice as fast as they could to store the learning oj the university (a big school). The phys-ical presence of Ice also shielded the life taking refuge underneath it. But there was no refuge from human evil.

In times of trouble human nature is magnified, for good and bad. It was no different then. People helped each other, and killed each other. One man especially. So Grandfather told me—and I believe him—of a man who ruined Ice.

It happened toward the end, when everything was in turmoil and people were trying to break into our enclave. This one man took ad-vantage of the confusion, exploiting the fast growth rate of Ice. The other scientists knew he was doing something wrong, and tried to stop him. The story is that he killed them. He was a foreigner to the group, and they never trusted him. They said he was too tall, taller than everyone. And selfish. He wanted to live—to live longer than people can live, longer than they should. He ruined it all, because he set Ice to grow and not stop, so it could work on the ultimate en-tropy question: human death.

His name was Lucian On. I hope he died a very bad death. But his programs live on. That's what the stories say.

There's one more thing. Remember this part.

Those who created Ice worried about runaway growth. They built in a subroutine, a destruct function to protect earth from Ice. The function causes Ice to combust. On a small scale, that would be no worse than, say, a forest fire. People call such things fail-safes. To keep you safe in case of failure. It wouldn't be a perfect solution,

there would be some atmospheric effects from hundreds ojsmall fires all over the world. But if necessary, they were prepared to destroy Ice once the dark field passed.

If your children or their children ever reclaim technology, Tolav, they must never use this subroutine. It's far too late for this fail-safe. Ice is too vast now. We think most of America is covered. Maybe Europe, Asia, and South America as well. Nobody knows exactly. But even at a fraction of that size, a combustion of Ice would be a firestorm. Afire like that would feed on the atmosphere, driving off what it didn't consume.

Earth must never end in fire, Tolav. It's worse than Ice. By far.

Another poem, but never mind.

There's more I could say, so much more. If this is to be a record, it should be more complete. It should be a real history, because the past matters, and mustn't be forgotten. Perhaps others have written it down; I can't bear to think otherwise.

But now, Tolav, you must leave this place. Escape to the surface. Take Jena with you. She's strong and will bear fine children. Oh dear, listen to me! I sound like a barbarian myself. Well, perhaps I am, af-ter all.

You have a good heart, Tolav, and will raise up good boys and girls to follow in your path. Take the medallion with you and play its message for your children. Educate them. Wear it around your neck, my darling. It is my blessing to you.

Now go.

Zoya had been sitting so long she felt frozen in place. But during the recitation, she couldn't move. If she understood correctly, she had just listened to a voice over nine thousand years old.

Whoever had made the recording, she hadn't identified her-self. Zoya would have liked to know her name. She reached out, and Wolf handed her the amulet. She inspected it, turning it over in her hands, seeing now that its abstract patterns were really a beautiful calligraphy of *readmereadmereadme*. Inside this black mechanism was a story that was very old even when it was recorded: the story of Lucian Orr, Ice programmer.

So here was *intention*, indeed. The second program that sup-planted the first.

Longevity was the intention.

She looked around her, at the forever snows. So, in all this world Ice, did Lucian Orr get his wish?

Wolf was watching Zoya carefully, waiting for her to tell him what his amulet said. She handed it back to him. Then she translated as best she could, the words of the old woman—per-haps his long-ago

relation—a woman whose name was lost, but whose story still lived.

He listened with that same expression he reserved for at-tending to Ice and its world.

When she finished, he was left gazing at the amulet he held in his hand. "It never protected me," he said, his voice gravelly. "All the old stories. There was no truth in them."

He was sitting so still, as though he were carved from Ice.

She said softly, "No, Wolf, they're still true. But it's a buried truth. The old stories are like that."

He fingered the medallion absently, perhaps taking some comfort from it still, even though its blessings were different than he once thought.

She said as gently as she knew how, "It's as though there are two ways of knowing. Science for the outer facts. Stories for the inner ones."

"So," he said at last, "there's a difference, then?"

It silenced her. Wasn't it true that the world was commin-gled—what we know, and what we believe? And wasn't it true that in some sense the medallion *had* protected him and his ancestors, freeing them from the preserves, giving them a different life, perhaps a better one? But, looking at Wolf, she thought he didn't need her to say so. He would know, even-tually.

After a time, he began to pack up again, and she let him have the solitude. She needed time to absorb this tale herself. It was a tender story, but dark. So sudden, earth's downfall. And not just historical fact, flesh-and-blood fact: Tolay, his grand-mother. The oranges.

Before she packed up the radio, she hailed the ship. There was no immediate answer. Before Wolf started up the sled, she tried once more. Anatolly should hear this tale of the amulet. It resolved some questions; and it raised several new ones. Lucian Orr; the matter of the *subroutine*. . .

But the radio leaked only static in reply.

For the first time since she began her sled journey, there was no answer from Ship.

\_3\_

The Keep slept. The north wing lay quiescent, except for whis-pers of laser light, the eternal background noise of Ice.

Nit turned from her sentry post at the corridor opening. "Please hurry!" she whispered.

"Almost done..." Kellian bent closer to the keyboard to see in the dim gallery. It was a clumsy arrangement, working on a tronic computer and translating to an optical platform, but of course no one knew how to make an optical computer—ex-cept Ice.

"You've been saying 'Almost done' for an hour now!" Nit was peering around the doorway from time to time in quick jerks.

Hilde was off on one of her midnight trysts, leaving a gap in dormitory security. Now Kellian would by God get extra time on the node. And she needed the cloak of darkness to take her wafer and download her obo work into the tronic station.

Nit made a good, if skittish, ally. She dared more than she thought. And she was grateful to Kellian for

helping her with her instruction in computer programming.

"I'm stupid," Nit had said when Kellian helped her. "They call me Nitwit. Except they can't, because it has two syllables."

"You're not stupid, you just don't learn by rote, the way the nuns teach."

"How do I learn?" Nit asked. Large brown eyes gazed at Kellian with open devotion.

"By doing."

Sometimes, Kellian had let Nit try to write programming code, letting her make mistakes and fix them. A smile skittered across Nit's face when she got the fixes right.

Now, Kellian had to concentrate on her own learning curve. The keyboard clattered under her fingers.

A sound.

Kellian stopped inputting. Around her, Ice hovered, somno-lent. Against the silence, she heard a distant cry.

Nit said, "A snow witch." She looked out into the corridor as though she thought one might be lurking there. "Sometimes at night you can hear them wailing." At Kellian's look, Nit said, "The brothers use them for sport."

"The nuns allow that?"

Nit shrugged. "The brothers have to discharge their aggres-sion. It's the best way."

Kellian turned back to the keyboard. "They should put them out of their misery." It was disgusting to torture the grotesque creatures. The preserves routinely euthanized the ill. Well, perhaps the brothers had more power there than she first thought.

Nit jerked back from the doorway. "Rat shit! Someone's coming."

Kellian toggled off the node. Grabbing Nit by the arm, she ducked behind the data console, crouching.

They waited, hardly breathing. Nit trembled at her side.

The hall was black. They stared hard, watching for the tell-tale deeper black of a nun's robe, listening for the padding of feet. Had the nun seen their probe lights? Hope to God she thought the lights originated from Ice and not a wayward novice from Ancou preserve.

Kellian had always gone her own way and didn't plan to change now. She worked on her own ideas by night and Sister Patricia Margaret's by day. Sister's approach was to match the signals from Ice, feeding back its own data with identical data, or slightly revised data. It was a kind of "We hear you" ap-proach based on the theory that Ice was programmed to com-municate with people. An interesting enough idea, but even Kellian thought Sister Patricia Margaret's "signals" might be the height of wishful thinking.

A black shadow fell on the archway. The shadow passed.

After several minutes, Nit scurried to the opening. She pro-nounced an all clear, her voice breaking up like bad data.

Kellian pounced on the workstation, rushing to complete her data transfer: her obo program, wiped clean

of knowledge, configured to adapt and learn—but in a crystal world, instead of a human one.

Nit whispered, "Hilde will kill us if she gets back and we're not in bed."

But Kellian wouldn't be intimidated by Hilde, because the dormitory dictator was vulnerable. She had a lover among the brothers. So Kellian wasn't the only one with secrets.

"Oh..." Nit said from behind her.

"Hush, can't you?" Kellian snapped, her hngers tlying over the keyboard.

"Oh..." Nit moaned again.

When Kellian turned to upbraid her, there stood Sister Patricia Margaret Logue, holding Nit by the ear.

Kellian didn't hesitate. She pushed Enter.

Sister Patricia Margaret's eyes were mere slits. "Stand, Kellian Bourassa."

Kellian did so, feeling worse for the paralyzed Nit than for herself.

The sister's free hand was on her cane. It looked like it could deliver a bad blow, but the sister needn't deliver her own beatings when she had lesser nuns—and Hilde—to do her bidding.

Giving Nit's ear a last twist, she turned to the girl. "I never knew you for a dolt, my girl. Was I wrong?"

"Yes, Sister," Nit stammered.

"Then you are a dolt?"

"Yes, Sister."

Sister Patricia Margaret closed her eyes in sour resignation. "Nita, go to bed."

As Nit rushed off to obey, the old nun's cane gave her a none-too-gentle prod in the backside. Then she slowly ad-vanced on Kellian. The nun bent to the keyboard and clicked away, scanning the display.

She turned back to her prodigal student. "You defy me, girl."

Kellian made herself look the old nun in the eye.

"Has my forbearance taught you to overreach your station?" Sister Patricia Margaret nodded to herself, drawing what looked like a bad conclusion.

"I pressured Nit. It's not her fault."

The cane came up and pointed at Kellian's left eye. "Don't presume to advise me, postulant. I know where things stand with you and Nit."

Kellian faced the cane. There could be no fleeing the woman, not here in the Keep.

The nun continued: "You think it's a game. Sneaking out. Dumping your tawdry programs into our system. Oh yes, I know what you've done." The cane came down, clanking on the floor. "You think you're still in the preserve, where you could make a mess because no one expected better of you."

A flare of light bloomed from the corridor. Ice's luminous data, recorded by the tronic stations for later

scanning. Sister paid no attention.

"You are *not* at the preserve. This is a far different order of things, mark me, girl. The Zoft has existed for six thousand years. It is the repository of human civilization and knowledge since the time of the Ecos. This is not your miserable preserve with its foretellers and traders." Her eyes pinned Kellian for a moment. "If you want to go back, it's too late."

"No, Sister," Kellian said truthfully. It was unthinkable to go back. She had never belonged among miners and foretellers.

The nun snorted. "Well. That spares me from turning you out into the snows."

She eased herself into a chair, leaning on the cane. It was still dark, and Kellian couldn't make out the nun's expression, but her voice began in a softer tone: "I won't prescribe a penance. You expected one, but you're wrong again. I'm judged by the conduct of my girls. And right now, I can't afford to expose your stupidity. We've lost Ice nodes, you remember? Now we have only three. Mother Superior tolerates this work only out of fondness for an old stalwart."

Her voice dropped even further. "Your success is tied to mine, Kellian. We will sink or rise together, mark me."

Kellian felt abashed. What began as a daring quest now seemed less righteous.

"I don't know why I tolerate you," the old nun said, more to herself than to Kellian. "I grow too soft. But your boldness in-trigued me. We've become so staid."

"I'm sorry, Sister." For the most part, she meant it.

A smile curled up one side of the nun's mouth. "Sorry that we're staid? So am I." She sighed. "So, my girl, what are you up to?"

"Up to?"

"Yes." She tilted her head toward the computer node. "What did you dump into the system?" Her voice dropped. "The truth, girl."

Well, the truth began with how the nuns had gone wrong with Ice. "We're getting lost in a mass of data," Kellian said. "An overwhelming amount of encrypted codes. And even in our own group, we're losing our way. Because the matching work is operating according to our own reasoning steps." She was sorry to have to tell the sister that her work was all wrong, but it was so. "I redesigned my obo program, removing everything it learned about the preserve environment."

Sister Patricia Margaret nodded. "So your dumb obo pro-gram is now even dumber."

"Yes." She plunged on. "It's a plastic program that can adapt and select new search paths, depending on what it finds. To keep it from getting tangled in reasoning chains that lead nowhere, the obo program will follow the path defined by the smallest number of logical relationships, or the most elegant equations. So it has a sieve program to filter things just based on how simple they are."

The nun tapped on the golden carving of the cane. "So you think we're contaminated by what we know..." Her voice trailed off.

"Yes," Kellian said, "and I think it strengthens the encryption to attack it directly."

"Perhaps." Sister Patricia Margaret gazed at the plane of Ice in front of her, into its endless body of crystal. "Perhaps it does." Her hand tapped on the cane's gilded crown. "But you might have asked me, first."

"Yes, Sister."

"Very well, then, Kellian Bourassa. I'll admit to being inter-ested. And I will sanction some time on your obo scheme." She held up her hand to quell any display of gratitude. "But you will still work with my group on the main project. I'll find some time on the nodes for you—but no more midnight raids, you hear?"

Kellian didn't try to conceal her sense of triumph. "Thank you, Sister."

"I'm an old fool," the nun muttered. "I was like you once. Full of fire, eager to make my mark. We're alike in more ways than you might think, Kellian. You're going to make a bad politician, like me. If I were going to give you advice, I'd tell you that the paths of our order will demand more agility than the logic paths of Ice. But you won't listen any more than I did."

There was an awkward silence. Kellian could not imagine anyone more unlike her than this old nun. But she felt embold-ened to ask a question that had been fomenting for some time.

"Sister, why do you think Ice is trying to communicate?"

The cane twirled in the sister's hand. After a time she said, "My belief is that it's trying to achieve a program goal. Commu-nication—with us—is necessary to fulfill that goal."

"But if it's necessary, why does Ice communicate so badly?"

"Now that's the real question, isn't it?" Sister Patricia Margaret rose slowly from her chair. "I might say that Ice is an expert system with complex knowledge but lacking in com-mon sense. Common sense of the sort required for discourse with an outside entity."

Kellian said, "Or maybe it has a goal conflict. One that de-feats its communication activity."

The sister turned to go. "All very interesting, Kellian, but it's late, and unlike you, I need a good night's sleep."

Kellian followed her to the corridor. "But what if it did?"

The old nun was walking away. She waved her hand tiredly. "Let it go, postulant. It's late."

Kellian hurried to catch up. "But mightn't that explain why Ice is failing to interface with us?"

The sister's voice trailed back. "We've never thought in terms of Ice failing. We've always thought we've failed."

"So you agree?" Kellian persisted.

Sister Patricia Margaret mumbled, "No such thing. You're not the first newcomer to think she had everything figured out. And harebrained theories are best entertained in the sober light of day."

The sister paused at the great doors guarding the wing. "By the way, how are you getting along with Hilde?"

"Well enough."

The sister's mouth curled a little. "Very politic." The smile faded. "I've decided to elevate you to the white robe, my dear. Your talents don't belong in dun colors." When Kellian gaped, the sister continued: "You'll share dormitory supervision with Hilde."

"Yes, Sister," Kellian managed to say. White robe... that was two steps up, skipping gray robes entirely.

Sister Patricia Margaret nodded, slipping through the door. As she left, she murmured, "That ought to shake things up a little."

Kellian watched her go, aware she had just glimpsed a bit of nunnery politics.

Knowing Hilde, she figured there would be more to come.

Wolf was crouched next to the sled, using his knife to poke through the scat. He flicked out a lump of something that looked like wadded hair. It tumbled away, driven by the wind. Wolf still wore his amulet, she noted. The English words *read me* had been displayed on his chest all this time. The stone re-leased its story when Wolf finally trusted her enough to allow her to pay him for the privilege of listening. The rules of his world were both odd and familiar. She was getting to know the man.

A few, large flakes of snow, riding the stiff breeze, caught in Wolf's beard. This was real snow, from the lowering clouds. In this arid land it was rare to see snow, according to Wolf. It col-lected on the plain of Ice, rippling in the wind like the coat of some polar animal.

Wolf sat back, cleaning his knife on an edge of a protruding crystal. Gazing into the distance, he said, "Snow Angel is head-ing to the preserve." He nodded northwest. According to Wolf, it was the preserve the doomed caravan had fled just days before.

Through a gauze of snow, Zoya could just make out a head-land looming a couple kilometers away. Vancouver Island. The former island.

Even as she tucked her gloved hands under her armpits for extra warmth, Zoya's mood plummeted, along with the tem-perature. She had no time for Wolf and his obsession. Her peo-ple had no time for this. So much was lost every day, every hour, as Ice devoured their future. And now, the ominous si-lence of Ship. She had spoken with Lieutenant Mirran. He said it was a fluke of atmospherics; an electromagnetic disruption. It felt like her lifeline had been cut.

She and Mirran exchanged information. He quickly dis-abused her of the notion that the subroutine described in the old woman's story offered any solutions. A *holocaust*, he'd said. Assuming the program even exists. Assuming the recording is real, not a hoax. The story of Lucian Orr and the longevity question—it might be true, or not. Verification was lacking. Mirran was more taken with his own work on encryption, and die extraordinary complexity of it, encrypting whole words in-stead of letters… he went on in this vein.

She mentioned the shuttle. He mentioned captain's orders.

I knew your father, she wanted to say. He would have given me a damn ride. She signed off. She held her tongue, but it had a dent.

She looked at Wolf as he wiped down the solar collectors on the sled.

He was a man fond of diamonds. He now had two of hers. She'd gotten him started collecting, and it gave her a certain power over him, unless it was the other way around.

She plunged ahead, trying not to think. Too much thinking was never good when you must do a hard

thing. Reaching up to her left ear, she found herself saying, "How many?" When she had his attention, she went on, "How many in exchange for turning back on course?"

"Keep them," Wolf said, climbing up onto the driver's plat-form.

He had just turned down a fortune to hunt his prey. "Oh, Wolf," she said, "such a powerful hate." Snowflakes hit her face like small pellets of anesthetic. It was going to be a cold ride.

Foot on the pedal, he started the sled. His voice came very soft: "1 think you know something of hate."

Zoya hesitated. Everyone has some reason to hate. But you don't let it drive you. Her heart didn't burn on that cold fuel. Not like Wolf.

"I'm close now," he said. "I can smell the witch." He turned to look at her squarely. "This one waits for me, you under-stand?"

Hate on both sides, she thought. "The creature may kill you, then/

He shrugged.

"So little to live for, Wolf?"

"It's enough," he said, starting the motor.

They turned due north. Zoya resisted the urge to turn around and look back. They weren't in sight distance of the Keep, of course. Now, less than ever.

As the sled gathered speed, she put on her goggles to keep the snow from hitting her eyes. "Wolf," she said, standing next to him, refusing to sit, "you said that witches speak to Ice. Was that an inner story, or—an outer story?"

"I don't know."

"But what do you believe?"

He gave her a quick glance. "That they can." Under the run-ners, small hillocks of Ice caused the sled to bounce and pound.

Zoya flexed her knees to cushion the lurches of the sled. The act of riding the humps and crashes felt like some ancient ice sport. Judge the timing of the next hillock, bend, flex, rise...

She heard herself say, "Ice makes them live a very long time."

"I've told you that," he said through a snow-crusted beard.

With what intention, she asked herself, knowing the answer already, like her body knew how to time the hillocks, like knowl-edge comes when you stop thinking. Longevity. Orr, the man who ruined Ice. Lucian Orr set Ice to practicing. On humans.

To judge by what she'd seen and heard of snow witches, practice didn't make perfect.

"That's their problem," Wolf said. The sled hit the ground, over and over. "They don't die." From the expression on his face, he was ready to change all that.

The headland rose up before them in the middle distance. He looked down at her satchel, where her gun

was stowed. "Arm yourself."

It was approaching dusk when they reached the preserve.

The ice paddies on top of the preserve had been scraped clean of their harvest, and the gun emplacements stripped. All that remained of the entrance to the preserve was one tower, standing like a lighthouse on the headland, obscured by a bluish curtain of snow.

She didn't ask, How do you know Snow Angel is here? By Wolfs expression, he had his quarry.

Wolf parked the sled next to the tower and gathered his hunting gear.

He pulled out a flashlight that was part of his trade with the ship.

"Here," Zoya said, moving in to show him the on switch.

He nodded, flashing the powerful beam to and fro. "Good."

At the tower entrance he bent down to pull away a shred of cloth caught in the doorjamb. He cautiously opened the door, but his flashlight revealed that the anteroom was empty. Once inside, he turned to her. "You stay up here. You'll be safe if you keep the door closed."

That might be for the best. She didn't want to witness an ex-ecution, or be a part of one. Let the man go chasing through this dark warren if he had to. The thought occurred that she could just take the sled and be on her way. Send the shuttle for him later. But no, it was Wolf's sled.

"How long will you search?" she asked.

"Not long." But he would say anything to fend her off and do as he pleased.

In a carrier on his back were the extra harpoons. The points glinted in the light from his flashlight.

"You don't have to kill her," Zoya said. "Her life is penalty enough."

He gave her an odd look. Then he stooped down to open the trapdoor. "Close this after me," he said. He climbed down, using one hand on the ladder, clutching his harpoon gun in the other.

Zoya turned on her own flashlight. Then she slammed the trapdoor shut after him.

He was pigheaded, rude, and insufferable.

He had no conceivable notion of the burden she carried, or why it mattered. She had told him what her mission was. Yes, he thought the nuns would chew her up and spit out the pits. Yes, he thought that if the nuns knew how to banish Ice, they would have done so by now. And he did tell her flat out it didn't matter if the ship couldn't talk to her, because they didn't listen to her anyway. He had all the easy answers, the ones that suited him.

She flung open the tower door and stalked outside, filling her lungs with freezing air. It felt good, cooling her temper.

The sled was parked over there.

It didn't need a key.

She could just borrow it. Unhook the cargo sled, leave him all the food. Mother of God, hadn't she

already paid him a for-tune in diamonds for the miserable thing? They would send the shuttle for him in a day or two.

Well, why not?

It was about time she had done with detouring. Wolf could come back up and announce that Snow Angel was heading for Alaska. Then she'd be a prisoner on a sled to oblivion.

She looked at the sled. All right, it would make her a thief.

But in service to Ship—her children—what wouldn't she be willing to do?

Snow pelted her face. Overhead, in the north, the cloud cover was tinged with a sickly gold-green light. The aurora, its display muted by the heavy overcast, looked like an old bruise healing. By its light she could find true south, even at night. If she left, Wolf would still have his trade goods, her diamonds, and his amulet. He'd be fine for a little while.

She stomped her feet off at the tower entrance, and stepped inside.

He'd come back up. She'd be gone.

It was ugly. She sat down on the cold floor, watching the trapdoor.

An hour passed. Two. She wasn't sure just when she stopped planning to defect and started worrying about Wolf.

But at some point she found herself drawing her gun and lifting the trapdoor.

Abandoned, the preserve didn't smell as bad as the lived-in one. A trace of mildew, rot, and chemical fumes. Not so bad, as preserves went.

She called out for him. Never mind that her shouts could at-tract Snow Angel as well. She was armed.

"Wolf," she called again.

There was still no answer, but now and then she thought she heard noises. Pings and thuds.

Zoya unbuttoned her jacket in the wanner environs. A drip of water came from somewhere nearby, and then a hiss of a ventilation grill. A draft blew over Zoya's head.

She had retrieved a flashlight from the sled. Shining it be-fore her, she stepped over the clutter from the preserve's hur-ried departure: cast-off items of clothing, trinkets, and there, a cloth doll, staring up from the floor with a single but-ton eye.

The corridor led onto a large gallery. Light exploded at her. Zoya jumped, but it was just the flashlight's beam reflected off glass.

She was jumpy, yes. Snow Angel made her nervous. They're not *people*, Worley had said. Maybe, in some sense, they weren't. They were experiments, driven half-mad by loneliness and starvation. To be pitied—and yes, feared. Fear made sense when you were facing something that could kill you for supper.

A putrid smell slapped her in the face, and intensified as she continued. Along with the heat of the place, it made her queasy. It was so warm. Zoya unbuttoned her jacket all the way, wiping a strand of hair off her face.

The gun was heavy in her hand, unaccustomed as she was to going armed.

A rustle off to one side. She stopped, listening. In a mo-ment, a rat appeared at an open doorway. In the pool of light Zoya threw on the animal, it stared at her, whiskers trembling.

She aimed the light into the room behind. No seething mass of rats... The rodent scampered away, and she went on, step-ping into another, larger cavern.

From the shadows, a figure came rushing at her. It swooped in, shoving Zoya in the chest, sending her staggering back. She lost her footing, fell.

In the next moment the gallery filled with a wild cawing like that of a prehistoric bird. As her flashlight rolled across the floor, setting up a strobelike pulse of light, Zoya saw a figure with flapping wings and festoons of yellow hair. It swooped close to Zoya while she was still lifting herself off the floor.

Something long and glinting sliced the air in front of Zoya's face.

Crouching before her was a woman holding a knife. She and Zoya were frozen, staring at each other. The face was pale and pockmarked, a ruined beauty. The eyes were lit with what seemed both surprise and terror.

In another instant, the woman jumped away, twirling in a mad dance. She was wrapped in a diaphanous gown that draped from her arms like the remnant of wings. Awful, high-pitched screams gushed forth, sustained by a breath like a bel-lows. The creature raised her arms and careened away as though trying to leap into flight, the knife in her hand like an outsized claw.

"Stay down," came a voice. Wolf was there, somewhere.

She turned toward the sound of his voice. She thought she saw him raise his harpoon.

With a bass cough, the harpoon gun erupted, hurtling its projectile across the gallery.

It must have struck the creature. From the far wall came an awful caterwauling like a decayed stream of curses.

Recovering her wits, Zoya scrambled for the flashlight, snatching it from the floor. She aimed it in the direction of the howls.

Wolf was dashing across the room, reloading his weapon on the run.

She swept the light. But there was nothing. The creature was gone.

"Here!" Wolf shouted.

She ran toward him. Unarmed. Where was her gun?

Against the wall, the spear stuck out where it had trapped the witch for a moment. A great hank of hair was pinioned in the spearpoint. At one end of meter-long yellow hair was a small, bloody patch of scalp.

Letting out a moan of frustration, Wolf grabbed the flashlight from Zoya and charged from the room. Zoya was right be-hind him.

Then, up ahead, he doused the light. She could hear his footfalls, pounding away.

Following in the dark, she tripped and fell over debris. Her elbow landed soundly and painfully against

the floor. Zoya lay doubled over in pain.

By the time she stood again, she was alone.

The only sound was that of her panting breath. She crawled over to the wall and sat against it, gasping. She opened her mouth to call after Wolf, then thought better of it.

In the profound dark, her ears were exquisitely tuned. It was a world of sound only. She heard the sigh of heat vents, the slump of earth, the ticking of something. But nothing of Wolf, nor of the apparition. Could the creature hear her if she moved? She doubted the witch—and having seen it, how apt the name was—could get past Wolf. She would flee him in the other direction.

Zoya stood up, cradling her arm, gone numb from her fall. She was now missing both the flashlight and the gun. Of the two, she would much prefer the flashlight.

She began following the wall back to the gallery. When she entered the cavernous room she crept across it until she touched the opposite wall. Then, sinking down on her hands and knees, she began sweeping along the floor for her gun. She didn't find it. In the dark, unarmed. She had to leave. Find the ladder.

Pausing in the blackness, she considered. Had she got turned around? The entrance was off to her right, wasn't it? Yes, to the right. She entered the long hall, stepping carefully, sliding her hand along the wall.

She passed a doorway. Whimpers.

Oh, dear Mother of Christ, don't let there be whimpers. It was only the rustlings of vermin, surely.

A child appeared at a doorway. A trick of the eye.

I don't need this, Zoya whispered to herself. It was all black-ness, no child. This isn't that corridor of nightmares. But was that another child there, in that other doorway? In the total im-mersion of dark, she peopled the world herself. Peopled it with phantoms. The ones she'd been nurturing deep down in her heart, that place with the rich blood vessels.

She passed by the doorway, trudging on, not caring what noise she made. She was glad to make sounds, so she didn't have to listen to the whimpers.

This was what she always hated about nighttime, the times she couldn't sleep, the things her mind replayed against the screen of her lids or against the dark of the room. She had al-ways thought she didn't sleep like other people, that stasis had altered her permanently, had transfigured sleep to waking dreams...

Light flickered ahead. Wolf, Wolfs flashlight.

The visions of children in the doorways disappeared. They couldn't hold on against reality.

But reality was not an improvement. There, standing before her in the hallway was a woman in a gown. Snow Angel, re-turned.

She held a torch, and blocked Zoya's advance.

"Huhhh" came the creature's voice. "Huhhhhh," a softer but not a nicer sound than the bird screech of the gallery.

Irrelevantly, Zoya thought, Be careful of fire around that filmy dress.

The woman approached, in a slinking step as in a ceremo-nial procession.

Zoya determined that when she ran, it would be forward, to the ladder, not back, deeper into the preserve. But that meant moving past the witch and the flame.

Snow Angel was close now, her face flickering in the torchlight, the skin mottled, but the eyes soft gray, the hair flickering in the torchlight like it was already on fire. Zoya moved to one side to position herself to slip past. Mistake. With her free hand, the witch brought up a fist and slammed Zoya in the temple.

Her head filled with light and pain. Very strong, that one, she thought as she fell.

She woke from a momentary stun. The nightmare wasn't over. Though her eyes were closed, she knew the creature was sitting on top of her. She could feel the heat from the torch against her face. A finger was tracing down from Zoya's forehead to her chin.

Zoya opened her eyes.

Snow Angel straddled her. Golden hair stuck out in all di-rections like an exploded halo. Thin to starvation. Her face was dotted with old scars, stretched tight over a perfect skull and high cheekbones. Zoya's mind was now racing in place. The creature's skin seemed to rearrange the pockmarks into pat-terns, giving her face a kaleidoscope effect and making her ex-pression hard to read.

Testing her muscles, Zoya found herself weak and nause-ated. In her half-dazed state, it was easy for her assailant to pin her down.

The woman held up a finger, as though getting ready to say something important. Then she slowly lowered it to point to Zoya's left ear.

"Lost," Snow Angel said. The word came out overenunci-ated, as though she wanted to get it right. An expression of profound sorrow gripped the woman's face. She nodded with slow exaggeration, as though the two of them shared some aw-ful secret.

Snow Angel held up two fingers. "Two," she said, nodding again. "Lost."

She had said two words. The snow witch could talk, if barely.

"Ice," Zoya whispered. Her voice sounded strange, like that of a little animal coiled and frightened in her throat. "Ice—did this to you. Ice rained you. Help me to stop it."

Snow Angel brought the torch closer, examining Zoya's mouth. Zoya let the woman touch her lips. "Help me," Zoya mouthed. It might have been the wrong thing to say.

The creature lifted up her head, opening her mouth. Zoya knew what was coming. She was going to howl. Zoya wished to God she wouldn't.

When the wail came, deafening and sustained, it sent a jolt through Zoya's nerves. *Run. Now*, a primitive part of her mind commanded.

Obeying, Zoya hoisted her body, throwing Snow Angel to one side. She scrambled away, but then she was dizzy, so dizzy.

She slumped to the floor again, leaving her mind elsewhere.

Wolf was bending over her. He helped her up and, as she leaned on him, they made their way to the ladder.

When they emerged into the tower, he guided her into a sit-ting position against the tower wall. She counted his harpoons. Some were missing. "Is she dead?"

"Yes," Wolf said. "But she got away." He managed a fragment of a smile through his beard, and Zoya realized he'd just told his first joke.

He inspected the wound on her head. "You'll live," he said.

"Good."

"Snow Angel spared you," he said, with what might be ten-derness.

"Maybe." Zoya remembered the flickering light, rippling over the creature's gown and skin. The gray eyes peering closely at Zoya's own face, tracing her finger down from hair-line to jaw... a finger hot as a firebrand.

She began to shiver, hard.

Wolf left the tower, returning in a few minutes with a pack from the sled. He brought her water, and, when she had drunk, he wrapped her carefully in blankets.

"We'll stay here," he said, settling down nearby.

The blankets were frozen stiff. "Come closer," Zoya said, trembling still. "That would help, I think."

He sat himself next to her. Around her shoulders came his arm.

The door to the tower was closed, and the trapdoor in the floor as well. They were as safe as they were likely to get. Still, she shook.

She leaned against his barrel chest. The arm cinched tighter around her.

"Is it still snowing?"

"Yes."

"I'm glad."

They sat for a long while in the dark. Zoya thought she could hear the sweep of wind outside, flakes of snow skittering over the rock tower. She was so tired, so awake.

"You should sleep," he said.

"I am asleep."

Just to nestle with another human being was a fine thing. It was no good, no good at all, to sleep alone, though God knew she had plenty of practice at it. She snuggled closer to Wolf. His strength felt like a benediction. She closed her eyes. Perhaps she could sleep. But she lay in a man's arms—a good man, though not a gypsy—and damned if she was going to waste it on sleep.

"Tell me about her," she whispered.

Maybe it would be a bad story. She was pretty sure of it. The wind gusted outside, buffeting the tower. If it weren't for the snow and wind and dark, she thought the story would never come.

But it did.

"Snow Angel," he said. "That's not her name."

She felt his voice rumble in his chest. She inched closer.

"Marja was her name, before. After, I called her Snow Angel. She killed my children."

Zoya's hand came up to his chest. She wanted to say some-thing, but she held on tight instead.

He continued, his voice even: "She had been gone for a year. When she returned, she found Bella and Andre at my camp. They were four and six years old the day they died. I only left them for a moment."

"When I came back, Marja was devouring them."

Zoya moaned. His hand stroked her shoulder, comforting her, though it should have been the other way around.

"In those days I traveled with a small group. We all had chil-dren and partners. But that day I had been off hunting on my own. She must have followed me. Later I figured out that she came to—visit us. But things got out of hand."

After a moment he said, "She was their mother. My wife."

Oh, worse. So much worse. This Wolf told a terrible story. She was sorry, for his sake, to have asked him to tell it. But he went on.

"I lost Marja the year before, when a snow witch took her. Sometimes they take people, to make more like themselves. Af-ter a year, maybe two, Ice births them. When it's time for them to come out, they can talk to Ice. By touch. That's another way to tell a snow witch."

Zoya didn't interrupt.

"By her condition when I saw her again, I knew she had traveled a long distance. She was in rags, and starving. Witches are always hungry. But she hadn't eaten in weeks. Until that day."

"When she saw what she had done, she begged me to kill her. She couldn't talk, but she bared her throat for me, and cried out. I was kneeling by my children's bodies. In a rage, I struck her down. But when I drew my knife, I couldn't use it. The more she pleaded, the weaker I became. I was weak that day."

"Not weak..." Zoya whispered.

"Still weak," he said. "That I love her so."

Hard indeed, Zoya thought. Oh, Wolf.

"Ice is her master, but she fights it. She comes to me so I can redeem myself. Most of her isn't human anymore. But the part of her that is, I will set free. Like I should have done that day."

He took a deep breath, then let it escape. "I came close tonight. I think she was surprised to see you, maybe angry. Maybe she thought you were my new wife."

After a pause he said softly, "She should know better than that."

Zoya thought of Maria and the two missing diamonds, the two missing children. Perhaps it wasn't anger she felt, seeing Zoya. Maybe it was only pain.

Wolf leaned his head against the wall of the tower. His story was spent. Perhaps it was good for him to tell it. She wondered if before tonight he ever had.

"How long ago, Wolf?"

"A few years," he said. "Not many years. Long ones, though."

The wind moaned around the tower, but it was a good sound. It filled her with mysterious comfort like old, hard sto-ries told by people you love.

"Someday, Wolf," she whispered, "you will marry again."

"Always married," he said.

His devotion shamed her. She had almost abandoned him, stolen his sled. Her eyes burned, and she held on to him. "I'm sorry, Wolf." It was a blanket statement, covering so much. Things she'd done, and almost done. Things she'd assumed, judgments made.

He patted her shoulder. "Sleep now, Ship Mother." She fought it, but to no avail. Sleep took her.

## CHAPTER TWELVE

## \_j\_

Kellian stood at the open doorway to the dormitory. In the cen-ter of the room, Nit was sitting on a small footstool, trying to eat her lunch while crouching over a meal tray on the floor.

Hilde, who'd been lounging on her bunk, swung her legs to the floor and sat up, regarding Kellian with an amiable gaze.

"Good afternoon, Top Kellian," came the chorus of voices.

Kellian flicked her gaze around the room. Hilde's gang kept their faces averted, trying not to draw attention to themselves, now that Kellian was the *other* white robe in the dorm.

"Nit," Kellian announced, "you're to come with me. I have work for you."

"She's not done with her penance," Hilde said, rising up from her bunk.

"She'll do penance, don't worry." Kellian waved Nit over to her, but Nit sat as though nailed to the stool. "What was her transgression?"

"Lost a shoelace." Top Hilde looked around the room, trying to summon support, but the postulants remained studiously neutral.

"Hard to lose a shoelace when it's laced into a shoe," Kellian observed.

Hilde shrugged. "She's not very bright."

But a safe target, isn't she? Kellian thought. She and Hilde re-garded each other across a room grown profoundly silent.

"Nit?" Kellian commanded. The girl finally extracted herself from the stool and hurried to Kellian's side.

Hilde sank back onto her bunk, affecting nonchalance. "Take her, then. We don't need any more disruptions of our routines."

"You need a lot more disruptions," Kellian said.

Out in the corridor, Kellian steered her charge to the sanctu-ary. They had another twenty minutes until lunch break was over, and the sanctuary was a favorite place, now that Kellian's white robe allowed her to *have* a favorite place.

Backlit stained-glass windows shed a jeweled brilliance over the pews and altar. It was here that Kellian came to be alone, and at times, to pray silently to her god Jehovah, the private god of her family.

"What about my penance?" Nit asked as they settled into the front row.

Kellian squinted at her. "If you must, go polish a candle-holder."

As Nit scurried to her task, the image of a nun bloomed in the air above the chancel. Kellian would have been more reminded of an angel if the nun wore white, but her habit was black. This holo was of Mother Superior Mary Carmelita, sixteenth Mother Superior of the order, short, doughy, and maternal-looking. Her smile was bittersweet, as though she pitied those who still wal-lowed in meaninglessness. Kellian was studying the laureates. She knew this one was no technologist, but a philosopher, phi-losophy being the preferred road to elevation.

"How are laureates chosen, Nit?"

Nit was tackling a candelabra as tall as she was. "They vote. But no one's been elevated in a hundred years."

"Who votes?"

A deep voice whispered from behind Kellian, "The sisters."

"Don't turn around," the voice added.

Nit did, though, and nearly dropped the candelabra on her feet. A brother, she mouthed.

"The sisters vote," the stranger continued from the pew be-hind her. She could smell his male scent. "You won't see any men in those holos."

He was daring much. Brothers had no business in the sanc-tuary. They had their own sanctuary, downstairs. And further, they should never speak to a postulant.

Kellian couldn't help it, she turned around.

The brother was startlingly handsome, with deep brown eyes and a sensual mouth.

His hand came up to her temple and firmly turned her head toward the front again. "If they come in, you don't want to be seen talking to me. Do you know, newcomer, what they do to brothers who consort with postulants?"

Kellian didn't want to guess.

"They castrate them. We have a lot of castrated brothers."

Nit was still gaping. Kellian waved at her to turn back to her duties.

"The nuns break that rule freely," he said. His voice was a creamy, bass sound. She'd missed the company of men. "The ranking nuns take lovers; it's an open secret. But you don't know much about our

perverted little world, do you?"

"Enough to get by."

He chuckled. "You're sure of yourself, I'll give you that. I like spunk." His voice came nearer. "I've heard you're ambi-tious. Is that right?"

"No." She didn't think she was, but perhaps others saw her that way. "I just want freedom to work."

She could feel his warm breath on her neck. "Just? Any brother would give his left testicle for such freedom. But don't worry about us, worry about yourself. Or are you too dumb to worry?"

As she tried to think of a good retort, she heard him chuckle, a nice throaty rumble that both irritated and attracted.

He continued, "You got your white robe in a hurry. Now you'll draw attention, not always good around here. I can teach you a thing or two, so you won't get tripped up. We know more about how this place works than some of the nuns. We get all the dirty assignments. It's a good way to learn."

She turned around to get another good peek at his face. "So why should you help me?"

His hand pressed against her face, turning her around. "You know about Hilde," he whispered, close to her ear now. "Don't report her. That's what I want."

"Did Hilde send you?"

"Hilde would never stoop to begging. It's one reason I love her."

Oh, so this was *that* brother. She was surprised by a wave of jealousy that Hilde had such a lover. "I won't tell," Kellian said. "I never intended to."

"Easy to say, postulant," he murmured.

"It's *not* easy to say. She's a dragon."

He laughed softly. The pew creaked behind her. Then his voice was very low as he whispered: "Does it change your mind if you know that I'm also Mother Superior's consort?"

Nit, who was listening, almost buckled.

"No," Kellian said. "Maybe it should change your mind."

"Hilde's punishment would be to go outside the walls. That would be the nicest thing Solange would do. The old harridan doesn't expect me to love her, but she does expect loyalty."

He continued, "Here's your first installment of brotherly knowledge: Your Sister Patricia Margaret Logue is a big sup-porter of yours. But she's vulnerable."

"I know that," Kellian snapped.

"Shut up. You don't know anything. She tries to protect

Sister Verna, but Verna is old and cranky. Now they've sent Verna on a mission. When the sisters disappear around here, they're said to be on a 'mission' to a preserve. Sometimes they don't come back. Lost on the barrens. What really happens is that they're put into a deep sleep—in Ice. As an

experimental interface. And they wait for Prince Charming to wake them. Only trouble is, the prince never comes. Ice ignores them."

"You're lying," Kellian said. He was trying to subvert her, to ruin the sisters in her eyes.

His voice was relentless. "Solange thinks that the witches can communicate with Ice, that Ice itself has altered them for the purpose. She hopes one of her volunteers will be trans-formed by Ice to become a pure channel, interpreting between crystal and human intelligence. She's counting on the nuns' pu-rity of purpose to keep them from succumbing to dementia. A nice theory, isn't it? Solange's personal translator, frozen into place, serving the sisterhood."

Kellian began seriously to doubt this brother. Ice didn't cre-ate witches. It was ridiculous. Ice was a computational device, not... a laboratory.

He continued: "Just in case Ice ever tries to wake one of Solange's volunteers, they're chained. The ethical sisters won't tolerate perversions. They don't want to be responsible for the snow witches' crimes. So the collars provide the humanitarian dimension. You wouldn't expect less of the nuns, would you?"

"Why would they experiment on a frail old woman? Why not take healthy people?"

After a beat, he said, "You're going to fit in well here, postulant."

"I didn't say I approve. I'm just testing your hypothesis."

"It's no hypothesis. Who do you think gets the work of en-tombing the sisters?" The *brothers* was the unspoken conclu-sion. "And they take all ages, just to see if the variables make a difference to Ice."

Kellian shook her head. The nuns weren't perfect, but they weren't monsters. "I don't believe Sister Patricia Margaret could be part of this."

"Listen to me, postulant. She's *not* a part of it. She doesn't know. I *told* you there are secrets here. Your old nun is kept out of the higher circles. They can hardly wait for her to retire. But she's popular with the rank and file, so they humor her."

Kellian shot back, "I've heard the brothers torture snow witches. For sport."

"If you want to talk about snow witches, that'll be our sec-ond installment. Keep Hilde's secret, and we'll meet again to pursue your real education."

She heard him move behind her. Before he left, she said, "I don't care what Hilde does. Except for one thing." She paused. "Tell Hilde to back off of the girls."

He expelled an impatient breath. "It's how she keeps our se-cret. Through a show of power."

"Tell her."

His voice sounded vulnerable for the first time. "I'll try. Don't expect miracles."

"I can't help it."

Nit replaced the candleholder in its niche and swung around to face Kellian. She wiped the sweat off her face with a fold of her robe. "Brother Daniel's gone," she said.

Brother Daniel. So, Nit recognized him.

She turned around to find the chapel empty but for the two of them. And Mother Superior Mary Carmelita, hovering over the nave. Upon closer inspection, the nun looked decidedly less benevolent.

The north wing was cold that day. It was always cold, climate-controlled for the tronics. But today it was different. The tower-ing black walls were oppressive. She felt she was laboring at the bottom of the ocean. Her endeavors seemed pointless. And wrong.

She was a cog in a machine of suffering. Nit, Daniel, Hilde, Verna, Patricia Margaret. In a desultory mood, she logged on to her computer. Her node time had arrived.

She stared at her screen.

Who are you? was displayed there.

Tronics hummed. Postulants shuffled around her.

She kept staring at the display. Then she slowly placed her fingers on the keyboard. It could be some nun, hailing her. But they didn't communicate that way. It could be... her mind looped off in several directions, but came back to her fingers on the keys.

Kellian Bourassa, she typed.

She turned the monitor away from the station next to hers. Sister Patricia Margaret wasn't there that afternoon. Hilde, at the other end of the room, was ignoring her for the moment.

Thus she was left in relative privacy to spend the next hour talking to a stranger. Someone who seemed to know both a great deal and nothing at all.

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Swan sat eating his late-night supper. It was tasteless, as usual.

A lamp burned at his side, casting a disk of light over his resting spot. It had been a long day, and Swan's mood had been sliding down a long spiral ever since he came upon the lone traveler and killed him.

The lamp was a great comfort in his dark mood. He patted the lantern, leaving a bloody fingerprint there.

He was a murderer, he saw that now. The incident with the chained nuns had not been an isolated act. Ice had Kduced him to a predator. This wasn't what he'd had in mind, and it horrified him, even as he ate

Food was a problem in more than one way. There were no animals—none that he had seen so far—no birds, no insects, no mammals, except for rats. Nothing could grow, though here and there patches of soil had begun to form from thousands of years of dust from the equatorial lands and even, he supposed, meteorite strikes. But almost everything was dead.

There being no alternative, he had just eaten a man.

And he was still a little hungry... He chewed on a piece of meat. Blood everywhere. Dousing the light would help, but he didn't want to be in the dark.

He didn't have a normal metabolism anymore. With his al-tered chemistry, the definition of *normal* was up for grabs. It was cannibalism, of course. Looked at unflinchingly, it was the most repugnant of acts.

OK, he was a freak. One part of him knew that. But Ice, re-sponsible for his health, had allowed errors

to creep in. In fact, Ice was repeating those errors. In the prototypes. They craved large quantities of protein. It was a consistent presentation of Ice's error. Ice must search the carbohydrate/glucose-processing issue. Good thing he awoke in time to do a little more pro-gramming.

Meanwhile, he couldn't go on like this. Soon, he must claim one of the preserves' food benders, or make his own. Eventu-ally, there would be the equatorial lands, and he could live with some normalcy.

He stared at his hands, resisting the urge to lick them.

Just fighting the urge made him feel more self-respect.

Wasn't it true that even civilized people, under extreme cir-cumstances, ate each other? Plane crashes, sea disasters... Yes, they used to call it "the custom of the sea." Set adrift at sea, people drank urine, spilled their own blood to quench their thirst. At the end, they drew straws. It was the custom. A kind of normalcy.

But he hadn't drawn straws with this man. He hadn't ob-served the ritual that made it lawful.

So looked at honestly, he was a perverted being, one who had abandoned civilized ways.

On the other hand, strictly speaking, cannibalism was not against the law. People who ate others must answer to the law for murder, not the meal. Cannibalism was never illegal, at least not in the United States, where he was. And in *extreme cir-cumstances*—such as were brought about by the untimely ar-rival of the plague ship, and necessitating as it did his early awakening—well, people could easily break the ultimate taboo. The extraordinary could become customary, under ex-tremity.

He held the arm bone in his hand. It was awful. And nec-essary.

OK, he did feel better.

And next time, he would add in the ritual of the straws. Yes, it would help immeasurably to follow the custom. That way, he'd have a fifty-fifty chance that it wouldn't be murder. It was a flawed solution, of course. There tended to be flaws in things. It was the price he paid for the long life he hoped to live.

Once you've died you don't have to again. It was one more thing that could be said in his defense. You only have to die once. That also was customary.

The crystal ground under his feet was stained red. It sur-prised him, the way Ice soaked in the blood. He walked around, kicking sand over the stain. Then, anxious to be mov-ing again, he decided to push on through the night.

Ice faithfully reported on Zoya Kundara's path, as she unwit-tingly left her track, through interfaces and radio transmis-sions. That was reassuring, that Ice could accomplish new tasks. Just a little more reprogramming and perhaps his imper-fections could be healed.

But that could wait. For now, there was the gypsy woman. He knew where she was, approximately.

And now he had a sled.

Captain Anatolly Razo looked down at Midshipman First Class Novik, seated at his workstation. He was the radio operator of the watch. He was lying to his captain.

One indicator was the man's neck, growing red with embar-rassment. But Anatolly didn't need his flush of guilt to know the man was lying.

"No communications from Ship Mother or Lieutenant Mirran for the last thirty-six hours?" Anatolly asked again.

"No, sir," the midshipman said.

"Nor from the Sisters of Clarity?"

Novik's neck burned crimson. "No, Captain. No hails." Un-der Anatolly's calm gaze, the midshipman stammered on: "The electromagnetic..."

"... storm," the captain finished for him. "Yes, indeed."

Anatolly set his mouth firm. If he had the man arrested, he would tip his hand, and he didn't want to do that. Because he wasn't sure he held the winning cards.

But he knew who did.

Anatolly straightened his jacket and swept the bridge with his gaze. Secrets lay under their flat, dutiful faces. Father Donicetti had tried to tell him. There had been meetings. When Anatolly had confronted Janos Bertak, Janos claimed to be smooth-ing things over with crew. Then, too much of a coincidence, Lieutenant Andropolous was on sick leave, with a broken hand from a freak accident on the squash court. A crew member had managed to strike the lieutenant's hand with his racquet.

"Lieutenant Marusic," Anatolly said, "you have the bridge."

"Yes, sir," the lieutenant replied, all duty. All false.

He left the bridge and headed down the corridor to find Janos. It was second shift, and Janos was off duty. That was why Anatolly had come onto the bridge during his own sleep period, to see what might be done when Janos wasn't around. But Janos controlled the bridge even from his sleeping quar-ters, that was clear. Anatolly had once been good at reading his people, could tell by nuance and expression what was in their hearts. He'd lost that, in the press of administration and crisis management. *Delegated that*, as the priest had reminded him.

The past foreshortened into one lumpish misfortune. Per-haps his enemies had been right, that he was a bad captain. Perhaps achieving the post wouldn't have driven him so hard if he'd had a family... if he'd had Zoya. But their affair was cut short; she'd gone back into stasis, saying, *Anatolly, find someone who doesn't need to sleep so much* ... He would give much, right at that moment, to have Zoya in his arms, and be young enough to make it worth her while. He would give much to be first mate to another captain, and a friend to the crew. A loyal first mate, of course. What other kind was there?

Janos Bertak's kind, apparently.

Officers' quarters were a long walk and two decks away. He used the time to gather his thoughts.

If he thought it would be best, he'd call an election himself, or simply step down. But Zoya had been right—Janos must not lead. He was corrupt. Thrust into the politics of the homecom-ing, the sisters, the preserves—his leadership might damage the Rom irreparably. Janos might be young and vigorous, but surely the crew was not so fickle...

Janos had warned him the crew were discontent. God's Mercy, that was obvious enough. The earth was desolate, the mantle growing before their eyes, its creep over the Sahel al-most perceptible as one stared at the boundary.

Janos had said, give them something to live for... Anatolly had failed to conjure up such a thing.

But perhaps Janos had not.

As Anatolly passed crew members, they saluted or nodded. Or turned away. Some couldn't face him. It wasn't just his para-noia. A mutiny was under way, an awful peaceable mutiny. Did they think him so ineffectual they needn't even fight? He kept looking straight ahead. That it had come to this. Afraid to look his own people in the eyes! Oh, *Star Road*, he thought. He did love it. That surprised him, that it could grip him so, just when he was most despised.

He stood before the door to Janos Bertak's quarters. Knocked.

"Yes?" came the voice through the audio node.

"It's Captain Razo."

The door slid open. That surprised Anatolly. But then, Janos clearly had nothing to fear from his captain, or he would not have dared so much already.

Janos stood. As usual, his suite was overdecorated. Janos looked about as comfortable amid the swags and gewgaws as a monkey wrench in a jewelry box. Tereza never did have any taste.

"You've come about Sandor," Janos said.

That threw Anatolly off-balance. "Sandor?" What about his personal adjutant?

Janos pulled a long face. "I thought you'd heard."

"I don't hear as much as I once did, Janos. Suppose you tell me."

Janos paused, noting the captain's tone. "I'm sorry to tell you that Sandor's dead. An accident. He had found a reason to be on the cargo deck, and must have released a lever somehow. A pallet fell on him."

"I see," Anatolly whispered. The shock of it took a moment to absorb. Sandor, dead. Then he looked back at Janos. *So that's the price of loyalty to the captain, is it?* 

"Please, sit down, Captain." Janos gestured toward a couch, opposite him. Anatolly found himself needing to get off his feet. He sank into the cushions.

Janos had the grace to remain silent. The silence stretched on.

At last Anatolly said, "You could just call for a Ship election, you know."

Janos's jaw slid sideways, and back again. He didn't answer.

"I would welcome a vote," Anatolly said, surprised at him-self. "I'm not afraid of you, Janos Bertak. The crew will see you for what you are." He wasn't so sure, but the fact was, he had little to lose by a vote.

Janos kept his face dispassionate, but something seemed to fall away. The veneer—and a veneer it had been—of respect. "I do intend to. Soon."

So. All out in the open then. It was more of a relief than Anatolly could have imagined. He looked around Janos's quar-ters, as though seeing it for the first time. There was always something wrong with these rooms. Stuffed with furniture, decorations, figurines, pillows. And the colors. Janos was a man for browns and blacks. The room was awash with yellow, red, and green. Janos was out of place

everywhere he went.

That was because his place, as he saw it, was as captain.

Anatolly wanted to upbraid Janos. But how could he do so without making himself look blind and stupid? No, no recrim-inations. "What have you promised the crew?"

Janos's bald pate glowed under the chandelier. Perhaps he was sweating. Good.

"A fresh start."

"Ah. False hope, then."

"Not at all. Not false at all," Janos said mildly.

"Janos Bertak tells the truth for once?"

Janos produced a defensive smirk. "Now, Anatolly..."

That Anatolly stung. No formalities, now.

"I'd like an orderly transition. No more deaths," Anatolly said.

"Agreed." Janos wasn't bothering to deny the implications.

"Until then, I want the bridge back under my command. In exchange for my public call for an election."

Janos stared at the floor.

Oh. It was worse than he thought. He was to be removed by mutiny, was he? "Well, Janos? I could have you confined for treason," Anatolly threw out.

"That would force matters," Janos murmured.

"Good."

Janos shrugged.

"If you're so certain," Anatolly said, "why don't you just step forward right away? You think you've got the whole crew be-hind you, apparently."

"Soon," the former first mate answered, forcing his eyes back up to meet Anatolly's.

The man was supremely confident. But he was waiting for something. That little window of time was all that Anatolly had left. And he would have less than that if he called Janos's hand.

The silence was interrupted as Tereza swept into the room from their personal quarters.

"Anatolly!" she sang with unabashed glee. "A nice visit."

Anatolly was startled by her. The last time he'd seen Tereza Bertak, she'd been pale and hollow-eyed in hospital. Now she was glorious, infusing the room with yet more decoration, each kink in her red hair catching a glitter of light. And she was clearly in a splendid mood. That in itself boded ill.

A noise behind her. She turned toward the room from which she'd just come.

The noise grew louder. Though he hadn't heard the sound in a very long time, there could be no doubt in Anatolly's mind.

It was an infant crying.

Without opening her lips, Nit managed to say, "I found her."

"Where?" Kellian kept her eyes straight ahead as the double file of postulants walked to morning meal.

"Up." Nit's eyes flicked toward the ceiling.

They were in the rear of the line. At the next turn in the hall, the procession went on without one white robe and one dun robe.

They hadn't seen Sister Patricia Margaret since she'd lost her position two days earlier. The word was, she had carried her protest of Sister Verna's mission too far. That had not sat well with Mother Superior.

Nit led the way, ducking through a door, and lifting her robes as she ran down an aisle between shelves of supplies. Kellian charged after her, following her into a cramped storeroom.

At the farther end of the storeroom, Nit was peering out an archway. "Quick," she whispered. And they were off across a darkened foyer that led onto an even darker stairway. "She's on the ramparts."

Kellian eyed the stairwell. "Good. Now go back to the din-ing hall, before you're missed."

"What about *you* being missed?" For all her fears, Nit was starting to enjoy playing cat and mouse with Hilde.

Kellian shrugged. "White robe."

Then she began scaling the steps two at a time.

From behind her, she heard Nit call, "What shall I tell Hilde?"

"To go to hell."

The noise behind her might have been a gasp or a giggle.

Stone steps led upward, turning at landings. She hurried upward, holding her robes away from her feet, eager to spill her news before it burst her open.

At the top of the stairs, a metal door stood ajar. Kellian pushed past it, stepping into a blast of sunlight.

She was on the roof of the Zoft. Past the chimneys and fans and generators, Kellian glimpsed the stone parapets of the Keep's westward-looking frontage. On the opposite side, a sheer wall of Ice loomed close.

Sister Patricia Margaret stood at the parapets, looking out. The very picture of contemplation, detachment, and obedi-ence.

Well, Kellian would see how deep that litany ran. Now that Ice had spoken.

Sister Patricia Margaret spoke without turning. "So, it's you, Kellian."

Kellian walked forward to the edge of the rampart. Before her, the landscape was a wide, white world, but far away and miniature. In the distance, the skewed towers of Seetol could just be discerned, and

farther away, but more present, the stun-ning true ice slopes of Mount Raneem.

"How did you know it was me?"

Sister Patricia Margaret's cheeks had a rouge from the breeze whipping off the Ice wall. "Who else would *run* up six flights of stairs?"

"I had to see you."

The sister's voice seemed far away, though they stood side by side. "Well, now you have." She gazed outward, unperturbed. "Whatever trouble you're in, my girl, I'm. afraid 1 can't help you. They've retired me. I'm out of the halls of power, if I was ever in."

Kellian reined in her excitement to attend to her teacher for a moment. "What will they do to you?"

Patricia Margaret's mouth curled, but it wasn't exactly a smile. "I've been given my retirement. Hilde will take over my work until a replacement's found."

"But they can't retire you." The thought of working under Hilde was grim. "What about our work? You're not too old, you're not senile!"

The sister pursed her lips. "Thank you."

Kellian waited for more, then blurted, "Sister, we have to talk. Something's happened, and I just..."

"Just what?" Patricia Margaret's eyes clamped down on her. "You just what?"

"I just need advice."

"So you expect me to counsel you? Are you in trouble again?"

Kellian felt the words like a slap. "Maybe a little, but..."

Sister interrupted, "Pay attention, girl. I've fallen from favor. Are you listening? I can't protect you from yourself anymore. So you can't afford to be witless from now on." She let that sink in for a moment. "Yes, witless. You continue to believe—to act like—the Sisters of Clarity are about science. We're not. We're about power. If you wish to survive, you must learn the dance, my girl."

Kellian drew a breath to protest.

The cane came off the floor, shaking in Kellian's face. "Lis-ten, Bourassa. I made my choice. I confronted Mother Superior under penalty of disfavor. I knew what was at stake. I did it with my eyes wide-open. But you. You're a chick with your eyes still glued shut." The cane slowly descended, and she turned away, mumbling. "Open those eyes or you might fall from the nest." Her eyes searched the plain before the battle-ments of the Keep. "Long way down, my girl."

Kellian murmured: "I'm sorry about your friend. Sister Verna was sick. They shouldn't have sent her." If they *did* send her...

The sun glinted off the opaque tundra, rendering the plain before them full of light, yet hard to see.

The nun murmured, "She was too frail to go." She lifted her arm and pointed out through the stone reveal. "See there? That's the track of her sled. Toward the Koma preserve." She frowned, pointing in another direction. "Unless it's that one, heading to the mountains." Her shoulders sagged. "In any case, she's gone."

"She's your friend. I'm sorry."

"No," the older woman said. "She's my sister. My blood sister."

Kellian fell mute.

"So you see what I had to gain." Sister Patricia Margaret's profile grew more rigid. "I'm not sorry."

"Maybe she's not on a mission."

A white eyebrow rose.

"Brother Daniel says..." But the nun stopped her cold.

"Brother? Brother Daniel?" She let out a shallow cry that might have been a laugh or a cough. "Oh my girl, you are more deluded than I thought. Breaking every rule in sight, are we? Oh, you will fall a goodly way when you topple."

"But Daniel knows things! Like about those missions." Kellian blurted the words before the nun could stop her.

Sister Patricia Margaret turned slowly and fixed Kellian with a raptor's eyes. "And what about them?"

Kellian felt her mouth go cold and dry. "Well, he says..."

The eyebrow again.

"That..." Unfortunately she had Sister Patricia Margaret's full attention. She mumbled, "That Mother Supenor puts them in Ice as experiments."

"In Ice."

"Yes."

"And how does she do that?"

"He didn't say."

"Didn't say," came sister's voice, raspy and low.

"No."

The sister turned back to look out beyond the Keep's walls. She said, very low: "Verna and I came here when we were eight and thirteen years old. Our parents were dead. They took us in for charity's sake. I rose in the order. Verna was content with simpler things. Perhaps she was happier, in the end." Her eyes held tears that held on to her lids in the cold. "Happier than me. At least I hope so." Her voice ended in a shadow.

"Maybe she's not dead yet..."

The sister went on, not listening. "When I met you, I saw something that reminded me... of myself, when I was young. Call it passion—a certain fire. Something I thought I still had. But it had long fled. Going to see Mother Solange was my last flicker." She smiled on the half of her face Kellian could see. "It was worth it. Make sure when you make your move that it's worth it."

"What move?"

Sister's voice had a shred of the old taskmaster. "Whatever devilment you plan next."

"I'm afraid I've already done it."

From behind them came a voice. "Done what, pray?"

A woman stood there. Her short hair was a silver frame to a high-cheekboned face. By her posture she thought herself im-portant. Halls *ojpower*, Kellian thought. *Here she is, then*.

Sister Patricia Margaret bowed. "Mother Superior."

The woman walked forward, her cape whipping in the breeze. Her expression was alert and bemused. She was prettier than Kellian had expected.

Mother Superior Solange Arnaud looked at Kellian from a daunting arm's length away. "Done what, postulant?"

"Worked on the nodes, Sister... Mother Sister... Mother Superior..." She bit her cheeks for making a fool of herself.

"Mother Solange will do, my dear."

Kellian nodded, a feeling of exhilaration infusing her. This was Mother Superior, indeed.

Mother Superior turned to Sister Patricia Margaret. "Lamenting, are we?"

"Oh, yes, Mother," the sister replied. "I have quite a lot of lamentation to do. 1 thought I might do it up here without dis-turbance."

Mother Superior's voice was clear and rich. "One sister's dis-turbance upsets us all."

Sister Patricia Margaret's face was unreadable, carefully civil.

Solange turned to Kellian. "So. What is it that you've done on the nodes?"

The wind blew, chilling her shaved head. It seemed to blow her sense away. She was going to tell Mother Superior. Tell of her disobedience and her great discovery. It was so terribly foolish. But the blue eyes were waiting, and Kellian might never have another chance to speak to Mother Superior like this, in relative privacy.

"I sent Ice my diaries."

Sister Patricia Margaret closed her eyes. When she opened them, she was shaking her head.

"Diaries?" Mother Solange cocked her head. "You brought diaries among us?" Her tone put Kellian in a sudden dread. She was very close to the edge of the parapet. Mother Superior could push her off just for looking cross-eyed, much less breaking the rules.

But then Solange laughed. The laugh wasn't as nice as her speaking voice.

"The mighty Hilde couldn't keep her dormitory in line? You must tell me where you hid the file. Most entertaining."

As Sister Patricia Margaret turned ashen, Kellian blurted, "In my hair at first. Then in the latrine."

Mother Solange said, "And it's been a long time since Hilde scrubbed a latrine, I've no doubt."

Kellian had to grin at that.

"So you loaded your diary into Ice. And did it work?"

"I don't know. Ice hasn't responded yet. To that."

Mother Solange exchanged looks with Sister Patricia Margaret. "But Ice has responded to other things?"

"My obo program. Ice asked me... who I was."

Sister Patricia Margaret intervened. "She's given to flights of fancy, Mother. Pay her no heed."

"In what sort of language?" Mother Superior asked.

"In English."

"That's convenient. You must be a very special girl."

Kellian didn't like the sound of that.

Mother Superior continued, "So your obo program is down-loaded into our system? My, what a mess we've made. And now Ice wishes to get to know you personally."

Mocking. She was mocking her. "I don't know..."

"What? Don't know? After all that you do know? Such hu-mility!"

Kellian would have objected, but she found that Sister Patricia Margaret was standing rather heavily on one of her feet.

Mother Superior was speaking. "I came up here because I was concerned to see how you fared, Sister. I see that this pos-tulant provides some diversion for you. Very good. I know how you wish for Verna's company once more. I'm sure she'll have many stories to tell you when she returns. Don't anticipate the worst. These journeys often strengthen the sisters in ways we cannot know."

Preparing to leave, Mother Superior held out her hand, and Sister Patricia Margaret bent low to kiss it.

Then she draped her hand in front of Kellian. A large, ruby ring was asking for obeisance.

She hadn't expected this. It occasioned an awkward pause.

Kellian bowed low, but not low enough to touch the ring.

The white hand and the vermilion stone. She knew what to do, what she *must* do.

But the moment was passing, when kissing the ring would have worked. The two nuns were staring at her.

Kellian straightened. The moment had fled. She'd let it get away, pausing just long enough, and then she was stuck with what she'd done. But damned if she would kiss that ring.

The hand snapped back. Vivid blue eyes slashed across Kellian's face.

And then Mother Solange stalked off, cape billowing behind her like a thunder cloud.

Sister Patricia Margaret was already gazing out westward, calm, resigned, or deadened. She murmured,

"Well, I said we might sink together."

Kellian left the nun to her detachment. She hardly cared that she might fall from favor—with or without her mentor. It hardly mattered.

She made her way down the stone steps. Ice would be wait-ing for her.

#### CHAPTER THIRTEEN



The glow stood on the horizon, burning through the snowy air like the sun stuck at dawn. It was Errors Rock. It seemed to Zoya that they had been traveling for hours, never getting any closer. They were headed out onto the Paz, past the Olom Mountains to the south, their peaks reaching up through the semiglacier like teeth erupting in the maw of earth. There, be-tween headlands, lay a featureless, flat valley, growing enor-mously flatter as they headed west.

Their progress was slow. The sled strained against the snow-drifts, and Wolf stopped often to brash snow from the solar collectors and check for Angel's footprints.

Zoya stood next to Wolf on the sled, behind the windshield, sharing body heat with him. Wolf had let her sleep into the morning, and when they set out, she nursed a bad headache and a bruised temple. Despite that, she knew she'd gotten off lightly. It occurred to her that Angel had liked her diamonds. Next time she could have them.

They passed the last headland of the continent. The ship's science team said that Ice was thinner on the Pacific Shelf, only fifty meters deep. It didn't displace the ocean's water, it rested upon it. Despite Ice's geographic scale, it wasn't dense. And for all its vaunted close tiling, the centers of the atomic-scale pentagons were open. The techs said it was how Ice grew itself, by driving water through those open centers, forcing the crustal materials into solution and transforming it all to Ice. Lieutenant Mirran reported those discoveries to her with the high excitement of scientific breakthrough.

Zoya hoped that his enthusiasm with quasi-crystal wouldn't blind him to their need to destroy it. That was their purpose. As she looked at the tundra before her, she felt no compunctions.

The sullen landscape mirrored the glowering sky. They had left behind the luminous information stacks and the occasional streaks of geographic, glancing light. Ice was not talkative in this place. It seemed to brood, discontent with a lonely reign.

The geographical features of the Val Paz shrank behind them. Ahead, the terrain was uniformly flat, except for Errors Rock. The place gave new meaning to *the middle of nowhere*.

"It's a dead land," Zoya said to Wolf, raising her voice above the thrum of the motor.

Nodding at the bight horizon, Wolf said, "That's not dead."

Zoya didn't question Wolf's certainty that Angel was heading for the great outcropping. Any scat she might have left to iden-tify herself was obscured in the snow, but she left another sign. Her footprints. The shallow depressions were mere wisps, as though she had walked on top of the snow, wraithlike. But they led the way. By that evidence, Angel was heading straight for Error's Rock. And she'd been walking all night.

They swerved to miss a frozen upheaval, and Wolf's arm came around Zoya to help her keep balance. It seemed only natural for them to stand thus, moving together with the sled's rhythms. They were together,

for better or worse, bound by Wolf's quest. His story of Marja and her children had done the binding, as stories sometimes would.

To Zoya, Snow Angel had become more than a detour. Witches might be failed experiments, might talk to Ice. All she had were anecdotes, stories, and Wolf's assumptions, colored by obsession, grounded in experience. But even the nuns thought the witches knew Ice secrets. So cumulatively, she had more than stories. And she had her intuition.

Wolf was speaking to her, gazing at Error's Rock. "In my life-time, I've watched it grow," he said "It's bigger now. Much big-ger." Indeed, the formation was looming higher in the distance. For a moment it looked like a fairy castle, with many candles lit for a feast.

"Why does Angel go there?"

"Perhaps Ice calls her."

"Why?"

He squinted into the snow-shot air. After a moment he an-swered, "Ice doesn't want her killed."

She let that lie. She was too close to personifying Ice herself, and didn't want help. "Is there one witch who is—more power-ful? Who is not so damaged?"

He squinted at her. "They are all damaged."

"So no legends about a different sort of snow witch?"

"No, no stories." Wolf stopped the sled and jumped down to the ground to dust snow off the solar collectors.

He paused in his chore, squinting up at her. "Not all the sto-ries are dark, you know. The story of Queen Ria has a good ending."

"Tell me," Zoya said.

He nodded, but kept at his task. "It is foretold that when the Queen wins her victory, when she overcomes the Dark Prince, she will have pity on him and spare his life." Opening the mo-tor compartment, he checked the tension on the drive belt. He continued back to the cargo sled, checking ropes and clearing the rear set of solar cells.

As he worked, he said, "Because of this, he will fall in love with her, and she will accept him as her consort. They will re-turn to earth together, and when the Queen thanks Winter for her services, Old North will leave. As the Ice melts, Queen Ria will be reunited with her child."

He clambered back onto the sled, stomping snow from his feet. "And here is the ending," he said.

"The child Shinua is not immortal, because he had a mortal father. Knowing that, the Queen's consort gives his lady a gift. With his star power, he grants Shinua the gift of foreverness. So that when it comes the boy's time to die, as humans do, he will not be lost, but will rise up again, renewed, with the spring. And he will come back again and again with the season to glad-den the Queen's heart."

As Wolf depressed the accelerator, the motor clicked on and hummed to life.

"That's a fine story, Wolf," Zoya said, as they got under way.

"I always liked it best."

Before them, Error's Rock had grown in their view, now commanding the terrain, a mammoth plateau of flaring light. The snowfall gleamed golden in a wide nimbus around it. The sides appeared sheer, and the overall shape was geometric.

Wolf looked at her as she squinted over the windshield.

"It has five sides," he said.

She was not surprised.



As Solange Arnaud trod down the hall of the west wing, heads bowed to her. She did not require that the sisters stop and turn, that would be a waste of time. Saving time was also the reason that she took her briefings as she walked, with Sister Helena at her side, consulting her activated scroll from time to time. It was an elegant trick Sister had mastered, to walk and read at the same time.

"Sister Loselle has just left Koma preserve, and is returning north, Reverend Mother."

"Number of children?" Heads bowed to her, and she dipped her chin to each and every one. She held power over these sis-ters, and they in turn held power over her.

"Twenty-three so far."

Solange smiled. Sister Loselle and five other nuns were her very best, and most loyal. They would get the job done. Then they would accompany the children to the ship, to assure a proper cultural transition. That transition might drag on, of course...

"And any word from our vigil?"

"No sled sighted yet, Mother."

Of course there wasn't. She would be informed the moment a speck was seen on the barrens.

They entered the rotunda, where wooden floors became marble, and the great doors faced each other, one to the north wing, one to the barrens. Leading off the rotunda, the respective doors to the Hall of Honors and the Hall of Horrors. It was Sister Helena's duty to give the visitation record of the day.

"Forty and eleven," sister murmured, noting the direction of Mother Superior's gaze.

Solange pursed her lips. No need to ask which hall had forty visits, and which eleven. Sometimes she asked for the names of the sisters who viewed the Hall of Honors. But they would be names of those who curried favor with her. She took note of those capable of such manipulation, wary of them.

Crossing the rotunda, bowing nuns marked her course. She smiled at those she thought might be heartened by such atten-tion. But when she reached the sanctuary, she left the bowing and the reports. At her bidding Sister Helena remained outside.

The sole occupant of the sanctuary, Solange took a seat in the pews. Sensors found her, and graced the chancel with a hologram. Mother Superior Genevieve, this time. Badly com-plected. Young. Et cetera. Solange could have doused the laure-ate display, but that would look peevish, and perhaps worse.

Allowing her breath to settle her, Mother Superior began a meditation on Zoya Kundara, Ship Mother

of Star Road. Her re-markable saga. Janos had sent her such interesting stories.

Based upon them, Solange had prepared to receive Zoya. She hoped that the woman appreciated the effort she'd gone to on her behalf in the Hall of Horrors.

Beyond the dramatic personal events of Zoya's life, there was her role on the ship. An extraordinary concept, Ship Mother. Carrying forward a sense of mission amidst the extremities of the space journey; carrying the traditions, so intertwined with the religious imaginations of the crew. Solange detected some-thing further, a tenuous association of the role of Ship Mother to the cult of the Virgin Mary, never made explicit, and more or less tolerated because of that.

Culturally, it was fascinating. The role embodied enormous moral authority. Solange recognized power when she saw it.

It would not be long before she granted this Zoya Kundara an audience. She was planning carefully how to manage it. Janos Bertak thought that Zoya was irrelevant. That was a mistake.

Mother Superior Genevieve smiled down on her from the nave. The robes she wore had not changed from her time until this day—a thousand-year span. It was a simple lapse for Solange to see herself in those robes, and in fact, she had done so many times before. Perhaps a comfort, perhaps a torment. She would be more optimistic if Swan would contact her. But it had only been a few days, and who knew what resources he commanded, for help and shelter on the barrens? She felt she would see him. And soon.

In her imagination, an elevated Solange Amaud looked down on her. It was a good likeness of the young Solange Arnaud, captured holographically when she was thirty years old. When the time came, her holo would be ready.

Her time would be soon. The necessary events would knit together. Swan would come back. Zoya would arrive, and was even now on her way. Janos would command the ship—for a time.

Janos shouldn't dismiss Zoya Kundara. It was always foolish to discount moral power. Religions once flourished because of it. It would be a great achievement to win Zoya to the order. As a Sister of Clarity, Zoya would smooth the transition of the crew from religion to philosophy, from error to salvation.

The order had long taught that to move past confusion to clarity one must resort to a higher authority. Since it could not be deity, it must come from a figure imbued with indisputable moral integrity.

For some, Ship Mother. For others, Ice. It was a clear choice.

Zoya would have a chance to choose.

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"Father," Anatolly said, "I'm back."

"I can see that, my son."

"No, Father, I mean I'm really back. As Ship captain." He'd been awake for twenty-four hours, wrestling with politics. At dawn he confronted Janos again, and they horse traded. It might not be pretty, but at last a peace—of sons—prevailed.

Now he wanted the priest's blessing.

He explained, "We were at the brink of an election. I pulled us back from that brink."

"Maybe an election was just what we needed," the priest said.

Anatolly brushed past this. No, it *wasn't* what they needed. Tereza's baby changed the odds. Anatolly knew there were more where that infant came from... and that the crew was desperate enough to be impressed by babies and not by the many crises facing them.

Janos had been brokering a conspiracy about orphans for days, all behind Anatolly's back, and with full compliance from crew. It had taken all of Anatolly's wits to salvage his captaincy.

"I would have lost, Father. Then you'd have Janos Bertak in charge."

"I presume, then, that Janos is now facing court-martial?"

Anatolly coughed to clear his throat, his head. Father was way behind in the news. "No, he's not facing charges." He wiped his hands on his slacks. "I promoted him."

In the pause that followed, Father did not jump to fill it.

"Janos is now Commander and Chief Exec in charge of Debarkation and Deployment. As of this morning." It was a long title that Janos seemed to savor, but it was a long way from *captain*. That rank was still Anatolly's.

Finally, Donicetti managed a reply. "You promoted him."

That part was perhaps a little hard for the priest to grasp. "It'll keep the man content. In return, he won't challenge me in an election. He was always interested in ground matters, start-ing the colony, dealing with the nuns, things like that. But Ship is still mine."

"I see." As though Donicetti saw, indeed.

Anatolly didn't miss the tone. It was all very well for the priest to want Janos punished, but the priest was out of touch. He hadn't dealt with such nasty politics since he left the Vatican.

"Father, if an election was held today, Janos Bertak would win. Do you want a man like that in charge of Ship?"

"It appears he already is."

Anatolly's stomach streamed acid. After all he'd been through, and still he had to suffer the priest's derision. He rubbed his eyes, trying to moisten them, trying to push back a thundering headache. The priest didn't need to tell him it wasn't a perfect arrangement. He'd love to have Janos up on charges instead of commander of transition activities. The man was a snake. But this wasn't the time to challenge him. The time would come when Janos would answer for Sandor's death, and much else. There'd be a comeuppance, if there was any justice left in his beleaguered crew.

The priest's voice hovered just beyond the grate: "Why did you come here today, Anatolly?"

Prepared to defend himself, Anatolly had trouble shifting gears. He stared at his shoes in the twilight of the confessional booth.

"I want your blessing, Father." In truth, he needed his faith more than ever. The view of earth grew worse each day. They had made no progress on encryption. He wanted to believe that God was with them, that He hadn't died along with every other vestige of the Church. But Ice was on the move, like a cancer in

the gut. It was hard to believe God had any mercy in store.

"My blessing."

Anatolly frowned. Had it just been given, or not? His pa-tience broke. "God's Blood, Father, are you against me too?"

No shadow flinched behind the grate. But of course Father wasn't sitting there. He was sitting in the hard drive. Still, Father was implacable, and wouldn't have flinched in any case.

Donicetti's voice came more sympathetically: "My son, I am more for you than you are for yourself."

"Then act like it, Father! I need your counsel and blessing, not a lecture!" Anatolly had never spoke thus to the priest. Truth to tell, he had always been a little uncomfortable with

Donicetti; the priest wasn't of their blood, for one thing. He was Vatican-bred, used to absolute hierarchy, with no sense of what it really took to govern the Rom...

The priest's voice sounded harsh: "Tell me, my son, where did Tereza's baby come from?"

So Donicetti had heard about that after all. "An orphan, Father. The first. More are on the way."

"Where did the baby come from?"

"From the—sisters."

Father Donicetti snorted. "Yes, them."

It was a delicate matter, Father and the Sisters of Clarity. Naturally, Father was concerned that...

Donicetti spat out, "*These people* have usurped the mantle of the Church. *These people* have styled themselves a holy order, but they spurn God."

"As you say, Father, but..."

"As though the trappings have meaning without God. With-out principles. Without love."

It was true what the priest was saying, but in the real world of people and emotions there must be compromise, persua-sion, negotiation. The high-wire act.

"Make no mistake, Anatolly Razo. They mock the Church and our Lord."

"Well, you know, Father," he said, "it's actually a bit of a compliment, that they try to copy us. It fails, of course, but..."

"Compliment?" By the escalating tone, Anatolly saw he had misspoken. "Compliment? I know these Sisters of Clarity. They were a heresy long ago. You should study your history, Anatolly. They were denounced by Pope Innocent XIV as the devil's mirror. A monstrous parody, seducing souls away from our Lord to the hollow realm of philosophy. And now, here you are, in bed with them."

The image was alarming, coming from the priest. Anatolly wasn't in bed with the nuns, he was well aware that Mother Superior had dealt behind his back. He wouldn't forget that lit-tle piece of treachery. And yet, even if Solange made a slippery ally, he had to admit her order was all there was of civilization. Was it better to isolate her or engage her?

Anatolly mumbled, "We can't always choose our allies, Father."

"No?" The rumbling voice might have issued from the Vicar of Christ himself.

All Anatolly could say was, "You don't understand, Father. We're fighting for our lives."

Father Donicetti pounced. "Ah. But I'm fighting for your souls."

Anatolly could bear it no longer. He rose, shaking. "What's *soul* got to do with it?" Sandor was dead. More would die. And religion, instead of supporting him in his time of need, was re-moving its blessing. Of course it did sound bad, he realized, that business about soul.

"I'm sorry, Father." He sat back down, vowing to control his emotions. The Church was all that was left of his heart. Years of dulling administration had made him a man even he no longer liked. Only the Church could uplift him. He had made some ugly compromises, with Janos, with the nuns, but it was tem-porary. For a little while, Anatolly might dislike himself. But when Ship's crises were past, he would find his soul again... The priest was saying, "As penance, twenty Hail Zoyas."

Anatolly shook himself more alert. "Pardon?"

"Twenty Hail Mary's," Father Donicetti snapped. A flicker of light indicated that the priest had turned himself off.

Damn the man, anyway. Ship's priest should have been a gypsy-

### **CHAPTER FOURTEEN**



"I got through, Ship Mother," Jozsef Mirran said, on radio link. "I'm surprised you can't." He was referring to Ship communications. He had spoken to Ship.

Zoya was surprised that the radio worked, there at the foot of Error's Rock. Mirran's voice came sporadically, shredded by :he electromagnetic surges.

Several meters off, Wolf was scanning the crest of the mono-üth, using Zoya's field scope. She doubted he could see anyone up there, in the brilliant furnace, a full-spectrum incan-descence. In the surge and fade of light, colors occasionally bloomed and retreated. Up close, the plateau wasn't entirely sheer and uniform. Studding the sides were protruding facets of crystals. Furthermore, there were deep fissures into the mas-sif, some of which appeared to harbor trails. Wolf said that pilgrims used them to ascend, carving pointers for their fellow-believers along the way.

"... Bertak... Commander now." Mirran continued over the radio."... a promotion."

Zoya squinted at the radio pack, as though trying to catch it in a lie. "Commander of what?"

The monolith bloomed slowly from deep within, a swelling of violet, that subsided after a short reign.

"Transition... the surface . . ." came the sputtered response.

"Say again?"

"Transition. To the surface ... a colony."

"Why does that take a promotion?"

"Captain Razo... working too hard... not young."

"An old captain can be a great blessing, Jozsef. To keep a crew from foolishness."

"I'm sure Lieutenant Bertak will take... care of him."

Her worst fear. She turned her back on Error's Rock to col-lect her thoughts away from its unsettled lights. But they gilded the snow, stretching her shadow out long before her. Wolf was walking back toward the sled. Zoya watched him, biting her lip. There was more going on than Jozsef said. But was he with-holding or just ignorant? Zoya had known Jozsef Mirran's fa-ther well. She knew Jozsef himself less well. She was well aware that integrity did not often transmit down the generations as easily as hair color or the family jewels. She knew that Mirran chin, those Mirran cheekbones. But who was the man?

She went on intuition. "Jozsef, why do you suppose 1 can't get through to Ship but you can?"

Wolf came up to her where she knelt over the radio pack. She looked up at him, finding reassurance in his face.

"That Ice plateau... surges ..." He went on through crackles that seemed to drive home his argument.

On impulse, she said, "Jozsef?"

"Yes?" At that moment his voice came through so clearly, it was as though he stood next to her.

"Who is your captain?"

A silence followed. Finally: "Anatolly Razo."

"Remember that." She replaced the microphone in its cradle.

Wolf watched her as she rose from her crouch near the transmitter. "Ready?" he asked.

"Did you see her?"

"No." He handed the scope back to her. Then he hefted the harpoon gun from the sled, slinging it over his shoulder.

She followed him into the crevasse, the tall slit in Error's Rock, and they soon left ordinary daylight behind, for the inte-rior pathways of Ice.

It was pretematurally bright. Their boots crunched on the opaque floor, where numerous feet before them had trampled the facets of crystal.

Wolf had given her his large knife, and insisted she carry it. So if she was to murder anyone, it would be up close and not some easy, indirect thing. That would test more surely whether she should strike or not, and oddly, it settled her nerves.

Wolf led. The path ascended, as the crevasse changed from tunnel to open canyon and back again. Everywhere the archi-tecture was alight. In a silent storm, explosions of light carved themselves on a paler, background luminescence.

Wolf paused to examine a section of wall. With his finger he traced a crabbed line, the sign of an arrow.

"Ice can change these," he said. "They come and go. Lead people to traps."

Zoya doubted that. Scratches could disappear as the surface of Ice grew. Wolf moved with ease from fact to supposition and back again. Somehow, amidst all that, his survival instincts kept him attuned, kept him alive.

She followed him onward, just behind the harpoon gun, where it rested against Wolf's back.

"How do you know that Snow Angel is willing to die?" She thought that in Angel's madness there might be other reasons to lure Wolf here.

"She tells me."

"But she can't talk." Not much, anyway.

They made a switchback turn. Something lay in their path. Inspecting, they found a pile of cloth and a rusted cup, evi-dence of previous travelers. Leaving their gear behind, perhaps these pilgrims felt no need of provisions so close to their holy grail.

Wolf answered: "Her skin. You saw?"

Her skin... she opened her mouth to say, what about it. But she *did* remember the pockmarks. The ones that moved. Because of the flicker of firelight, though.

"She let me catch her a year ago," Wolf said. He was calling Snow Angel *she*. Zoya liked that better than *it*, though she knew why the pronouns were hard.

"She was beginning, then, to write things on her skin. She wasn't very good at it." As he peered at another wall marking, a spurt of indigo light shunted close by, draining his face to a bloodless pallor. "She does better now."

"But how does one write on skin?"

"With practice."

For the last few seconds they had been hearing a muted tin-kling sound. Like tiny bells, or someone walking on broken glass.

They were approaching another turn, a switchback. Wolf unslung his weapon, but never missed his stride.

When they rounded the bend, they saw the corridor was congealed shut with a thick tongue of Ice.

Wolf ran his hands over the surface of the wall. "Smooth," he murmured. "This is new." He turned to her, his voice drop-ping. "Better wait for me, below."

She didn't need to think about it. "I'm staying with you."

He narrowed his eyes, regarding her.

A tinkling sound, back around the corner, the way they had come.

Wolf rushed around the switchback, with Zoya close be-hind. The corridor was now closing there, as well, fencing them in. He began slashing at it with his harpoon. At the same time, Zoya heard a crinkling sound from around the bend, where they had just been. She drew out her knife and rounded the corner, only to see a narrow fissure to one side, where none had been before.

As crashings erupted from down path, she heard Wolf bel-low, "Go, Zoya; go!"

She dashed into the opening.

She was in a dark tube of greenish brown, like quartz stained by kelp and dirt. Her ears seemed stuffed with tinsel. Tiny cracklings.

Coming in was a mistake. Turning to leave, she found the door gone.

She pushed on the wall, and to her surprise it gave slightly. It was rubbery. There was a small crack that might be the rem-nant of the old opening. Inserting the blade of her knife a cen-timeter or two, she thought of digging her way out. But it was hardening, and she yanked her knife free.

The air was still and warm. Sweat streamed from her face. She hurried down the tube. Light up ahead summoned her, and she soon broke into an open cavern with sky far above, and a rush of oxygenated air.

"Wolf!" she called. And again. Echoes took up the word, skewed.

Around her radiated alternate narrow canyons. Five of them. She turned slowly, trying to gauge direction by the sun. That was hopeless, she was no tracker.

A movement.

Spinning to face it, she saw far down one tunnel, the flap-ping of shredded cloth.

She saw nothing more, but she knew. It was Angel. Stepping backward, she found herself hiding for a moment in the shelter of one of the tunnel openings. Maybe Angel hadn't seen her.

Perhaps the poor woman was fleeing Ice's maze just as Zoya was. She would sit and wait, she would listen for Wolf...

She closed her eyes to hear better.

The crinklings had subsided. So quiet as she leaned against the wall, her hand was sweating, and the heel of her hand slipped off its resting place. In its place was a rosy bruise. Jerk-ing away, she resolved not to touch Ice, not to reveal her posi-tion. Ice had no visual processing, but it might detect her in other ways.

That was a jump. To think that Ice tracked her whereabouts.

She took a calming breath. The tunneling and doors were natural phenomena. It was like being lost in a cave, like a spe-lunker.

Back in the open crossroads again. Now there were only four pathways where before there'd been five. One corridor was the way she had come. One was Snow Angel's place.

One had an enormous presence in it.

He was easily two meters tall. His skin sagged heavily on a rail-thin frame. His white hair glowed with a silvery fire. He was in profile to her, then turned. When he saw her, he huffed, "Zo." And then "Ya."

She fled down the fourth way. Behind her, the tunnel echoed with heavy footfalls, well-made boots on huge feet.

Her corridor was narrowing. Oh, Ice, don't close up.

It closed.

No, not entirely. At the bottom, she saw a crawl space. Scooting into it, she scrambled like a mole, using all fours, dragging herself forward using her knife. A tap on her foot. She jerked her foot close to her body and nearly leaped into a cold, open gallery. Zoya yanked herself around to face her pursuer.

But no one plummeted out of the hole. In fact, the hole was too small for her pursuer. It had barely been large enough for Zoya.

She allowed herself a cold, ragged breath. Then another. The sun was bright in the sky. Her eyes felt like spearpoints driving into her skull.

Then, remembering how quickly Ice could add or subtract from its substance, Zoya fled.

Swan watched her skitter away. She knew he was there. She looked afraid.

He no longer had the advantage of surprise. But he had other advantages. Ice was at his fingertips, as always. Or not exactly as always... The hole had closed up, clogged with Ice, in a matter of seconds. He sat back on his heels, startled that Ice would present itself in this way, these shifting corridors, these ambiguous formations.

He put his hand to the wall, and spoke to Ice.

Identify architecture here. Identify purpose of information stack

changes. Execute.

This entity executes goal-fulfillment searches. Processing creates

corporal bulk, or abandons bulk. Go.

OK, good. Ice was problem-solving, and the maze—perhaps the whole monolith—was the result. *Goal-fulfillment searches*. Highly desirable. But a small doubt gnawed at him. Why this mountain of light?

Was there a problem, one he hadn't been aware of?

He knew there were problems, that his awakening was in itself a problem. They were dealing with the problems, he and Ice, weren't they? So focused on Zoya, Swan had not been paying attention to Ice as he should. Things pulled on his attention, but he must remember the goals. Perhaps he had be-come sidetracked.

Hanging his head, he found that a slipstream of saliva was falling on his chest. He yanked his wrist across his mouth, cleaning himself. It was brutish to drool.

Swan hunkered down and began a more systematic look at the programs. Just a quick look, to calm him. He would catch up with Zoya soon enough.

But first he would find out why Ice had created Error's Rock. He hoped the name the Zeros gave the outcropping was en-tirely coincidental. He didn't like to think there were errors.

Zoya was running. She ran from the giant and from Angel. And there were times when she ran from herself, seeing a frighten-ing reflection in fabulously pure glass, a frowning woman armed with a knife.

Running might not help, but she couldn't stand still and be boxed in.

At times she saw Wolf, far down a passage, or, at times, at a higher level, inching along a shelf of Ice, within earshot but deaf to her shouts. He still had all his spears. But that could be a pro-jection, a saved picture from an hour ago... or had it been two or three hours now? In her growing dread, she suspected a pat-tern of intimidation in the transformations of Ice. Ice might be programmed to thwart her, in fact to kill her. Perhaps this was the fate of everyone who dared the privacy of Ice's largest thoughts... *Stop this*, she told herself. Stop running.

She was lost. Beginning to panic.

Sit down, Zoya. She forced herself to stop and sit. Her legs ached. She rubbed them, trying to collect her thoughts, formu-late a plan.

Her eyes darted to the sides, watching. Too jumpy, she couldn't think.

If Angel found her... well, Angel had spared her life once. Why would she kill her now?

And the tall man stalking her...

Her mind slipped into neutral. The tall man stalking her.

Many men were tall. No doubt many snow witches were tall. It didn't signify. And if it did, what difference did it make?

She stood up, shivering from the sudden inactivity. There were two snow witches in the canyons of Error's Rock. It didn't matter if one of them was the master of Ice. They would both be hungry.

She began to hurry down the fractured pathway. A line of sky above her burned bright from the sun.

Swan stifled a sob. It sounded like the bellow of an animal with its mouth tied shut. He sat on the ground, head on his knees. He opened and closed his right hand, trying to bring circula-tion back to it, his fingers like frozen tubes, like dead twigs. He was a tree in which the sap had run out. The husk remained. Only.

Now he understood about this gleaming tumor of a place. The whole rock of errors. It was devoted to a single problem.

The problem was Swan.

He'd spent the past hour probing his Looking Glass child. What he found had sent him to his knees, leaning against the plane of Ice. Around him the mountain sputtered with light, like an engine that couldn't start. Ice was spinning out of con-trol. Its programs were looping, unable to solve a metaprob-lem. The problem of Swan.

The problem went like this: He was long-lived, but flawed. The flaws were not due to his early awakening, as he had thought. The truth was, Ice didn't know how to perfect him.

This was as good as it got, as it ever would get.

Unless Ice moved to the next stage, a global stage. To do that, it needed to grow. Avoiding biological decay was a prob-lem resistant to solution. Ice was growing very fast to increase computational power. It was rapidly expanding across the equatorial land and oceans. Eventually, it would attain a global state of maximum Ice. The state of maximum Ice—according to its calculations—would be sufficient. Problems of human senescence would be successfully attacked.

But Ice's logic functions would be destroyed. Without the free lands and particularly the open ocean, Ice

could not shed heat efficiently. Ice's entire operations and data storage were sus-ceptible to heat generated both from earth's interior and Ice's data-processing activity. Therefore, enormous amounts of heat must be shed. But global coverage would overwhelm Ice's capa-bility to dump heat. It could no longer manage the earth's heat budget. Ice would break down as a computational platform.

Therefore, it mustn't grow to the point of maximum Ice.

But to overcome Swan's defects—which Swan now had made a goal-attainment priority—Ice must become maximum.

Must not.

Must.

An infinite logic loop.

The thought came to Swan that, after all, the price of life was death. Death was hardwired into the nature of things. Tears and saliva dampened his shirt. The fabric clung to his chest like some sucking presence.

This, this stinking and barbaric state was as good as it got? He wasn't a swan at all. He was just Lucian Orr—ugly, growing uglier.

He stared at the plane of Ice, almost discerning his reflection in it. But he was only a shadow there.

It was over.

In his head, he cycled back through the arguments, the pro-gramming, the logic. No escape. It was over.

He found himself weeping. The sound was terrible, but fit-ting. It wasn't supposed to end this way. It could all have been... perfect. Long-lasting. Eyes dripping, nose running, he experienced crying as a kind of internal rainstorm. He tried to stop, and then did. If once he let go, there would be no end to the tears.

His flesh sagged. He felt as if his bones had softened, all en-ergy fled. But he was thinking more clearly now. He wasn't go-ing to stick around for a lingering demise, in some heat war between earth and Ice. His existence, from the moment he had awakened, had been a trauma. He had lived in his head until now, with plans and programs, but all the while his body was disintegrating. The end would come slowly, miserably.

Death was his future. It wasn't fair, after all that he had been through. He had died before, and once you die... you don't have to... you shouldn't have to... It was wrong, horribly wrong, yes wrong, and he had been so close to breaking free, and now it was ruined. How many times was he to die? Twice? Three times? Four? Over and over and over.

A flood of heat rushed through his body, giving his bones tumescence, putting iron in his body, his heart. He stood, squeezing his right hand, feeling the vitality surging to get out. It was a relief to make up his mind, a relief to be done with it all.

He would choose the method of death—his twice, thrice death. It would be a big death. Why not? A grand death. Ice too. That ghastly, mistaken thing.

It was his to choose, and he chose a fire within and through-out Ice. The last resort program, one program he hadn't been in charge of. The fail-safe routine in case Ice should get out of hand.

And oh, it was out of hand.

He looked around him, thinking how hungry he was. It was an unworthy urge at a moment like this. The grandest scheme the human mind could imagine, and suddenly one was craving a hamburger. Oh, he wouldn't miss life, with its taunting indig-nities.

Still, he *was* hungry. It wasn't just a concept. And, it seemed appropriate. Even a condemned man is entitled to a last meal. He thought this Zoya might do well in that regard.

OK, they'd draw straws.

Zoya was transfixed by the sound. The singing.

A pure note of grace pierced the canyons. It erupted on a high, fine note, and then fell like a bird of prey. Swooping up at the last moment, it began a harrowing melody in a minor key. It was like a violin, a shattering soprano lifted aloft by an unseen hand. Zoya stopped, turning her head to sense the direction.

It was a wordless song. Just pure tone, such as a snow witch might command, if Ice gave monsters such instruments of glory. And indeed, who else could it be, but Snow Angel? Who else had reason to sing with such pain?

The voice subsided, still present, but farther away. Wolf would be following that voice. Zoya began walking toward the sound.

It had been a long while since she had seen anyone else, projection or real, but she looked down every finger of the changing Ice cave, into every fissure and canyon. By the light of the high sky, she could tell that day was fading. She didn't want to be there when night fell. She wouldn't be, if she had to climb up the canyon wall to the plateau and repel down the outer wall. All without climbing equipment...

A movement to one side.

Down that corridor, a fleeting movement. Stopping, she gazed into the shadowy fissure. There was something moving there. But whatever it was, it wasn't running at her. That much at least.

She walked toward it, coming up to a dead end.

It was the tall witch.

He was standing behind a window of Ice. He was pushing against it. But the thickness of the pane was too great. He saw her, too. Pushed.

Too surprised to move, Zoya stared at him. She began back-ing up, but checked herself.

He was well dressed. Good clothes, even new. The rest of him looked like it had indeed been around a long time. His face was a wreck, like a man who has lost a hundred pounds too fast. Skin hung from his neck in folds, tinted gray-green by the underwater light from behind the glass door.

His movements were slow, as though he was doing an iso-metric exercise with the Ice wall, testing here, probing there. Pushing.

She could hear him pushing, the slide of his hands along the plane of Ice, the shuffle of his feet.

As he mouthed something, she made out the word, "Zoyyya."

She managed to move closer to the pane.

He repeated her name, faintly. She put her ear against the Ice.

"Say good-bye, Zoyyya," came the muffled words, from un-derwater, from behind a veil.

She heard her own voice, breathing against Ice. "Are you Lucian On?"

"I used to be." He was pushing against the pane. She should flee, but in his gaze, she felt immobilized. "As you used to be Zoyyya."

The way he said her name was disturbing. The man was al-together disturbing.

"Say good-bye now, gypsy." His voice so muffled. But he was centimeters away. "It's over."

"What's over, Lucian?"

"The world. Didn't you know?"

She drew back, looking into his bleary eyes. She hoped she wasn't understanding him. But in the next moment he said,

"The program of last resort. I invoke it. A clean end in fire. OK?"

"Don't," was all she could think of to say.

"Then come here."

He was pushing. She could see the bulge of his arm mus-cles. He was trying very hard.

Suddenly she noticed that the wall was sloughing a little, at the top.

Then Zoya was running back through the fissure, away from the wall, away from the tall witch and his submerged voice.

The path slanted upward.

Cold. Dusk. Wind. Zoya registered the basic things first. Then came the analysis: She was on the top of the dome.

It was a plateau with upthrust jumbles, like icebergs frozen in a bay. The sky grew dark, tinting the formations a blue slate color, an implacable hue of bergs frozen since the dawn of time. Some towered over her, some were undercut and precarious. They were misshapen, asymmetrical. No information stalag-mites grew there, where the dome itself was the stack. Perhaps the bergs were the nightmares of Ice, illogical, relentless...

Crouching in the lee of a berg, she pushed away exhaustion and strained to stay alert. She would not call out for Wolf, lest she draw her pursuer. She feared this tall witch, as she did not fear Angel. Angel had come to contend with Wolf.

The tall one had come for her. The thought settled around her like a mass of frigid air.

By his eyes, he hated her. And, if there was any doubt, he threatened her. By his demeanor, she thought he wanted her to be afraid—of the fail-safe routine, what he called the program of last resort. Were they the same things? In the cold, her mind seemed to work more slowly, neurons firing in slow motion. Backlog of data. She put on her gloves and cinched her parka hood around her face.

In one direction the landscape stopped short and zoomed to the horizon. That would be the edge. She felt uneasy. Some-thing was wrong. Oh, yes, there was plenty wrong. But some-thing new...

Then it clicked into place. So obvious.

The dome was dark. The monolith that she had seen glow unabated for days had turned the lights out.

Only the buttery rays from the setting sun struck Error's Rock.

She stood up. Soon it would be pitch-dark, an awful prospect on a butte like this, with such inhabitants... She clutched her knife and set out.

In a few meters she came upon a ragged gown. Nearby, torn shoes, and what might be leggings. She had seen the gown be-fore. The flimsy cloth could not protect against the cold, and perhaps never had.

The skin on her back fluttered with anxiety. She turned. No one there.

But in the distance she saw Wolf standing, his harpoon gun on his back. He was standing very still. As she began making her way toward him, relief flooded down her arms, warming her. On his feet, yes. Alive.

As she approached him, he slowly turned toward her, then away. Taking his gesture for an all clear, she began to run the last distance.

He disappeared behind an outcropping.

When she reached the berg and walked around its edge, she found Wolf standing over a woman. She was lying on the ground, naked and spread-eagled. He draped a piece of dis-carded clothing over her loins. Over Snow Angel.

His knife was drawn as he knelt next to her.

Zoya rushed forward, afraid to see that Wolf had drawn blood.

There was no blood. Angel opened her eyes.

Sheathing his knife, Wolf cradled Angel's head in his arms. The gold of the setting sun fired her hair. But her face was dark and mottled. Her body was blackened with lizard-skin mark-ings that might be frostbite.

But then Zoya leaned closer and saw that the woman's whole body was writ upon, beginning at her forehead, and down the front of her body, down her neck, across her breasts and so on to the arches of her feet. The script was wobbly, ir-regular. Red.

Angel struggled to speak. Her mouth twisted, but nothing came but a soft growl.

Seeing Snow Angel struggle so, Zoya urged Wolf, "Read. She wants you to read."

Zoya could pick out much of the writing herself, but some words were strangely spelled, and in any case, it was Wolf's missive, not hers.

He leaned close, perhaps to see more clearly, and perhaps to be sure his wife could hear him, could hear him understand.

Then he began to say the words out loud, his voice only a whisper. My Wolf. My sweet Wolf. Canyou do it quickly? I'm afraid.

Snow Angel's hand pulled him, forcing him closer, to read the words scripted into her neck. The writing,

it seemed, was only on the front of her body, and it proceeded methodically, left to right.

He went on, as her hand clutched him, locking him in place: It will be hard to kill me. Make sure to do the whole thing.

Across her breasts he read:

The woman of the dark hair with diamonds. Do you love her? I hope you do. Be free. Life is so short, Wolf, unless it's too long.

Snow Angel's eyes closed, and her eyelids fluttered. Zoya didn't know how Wolf could read so steadily, but he went on.

Still holding her hand, his eyes tracked the words over the landscape of her rib cage.

Snow Angel's eyes looked to Zoya. She knew what part came next. She'd written it. *Help me, the dark woman said*. I will tell her: Ice exists to preserve the life of Ludan Orr. But it is failing be-cause of a logic loop. It tries to grow large to succeed. But it can't grow larger without breaking down. So even Ice can die.

Wolf had to let go of her hand to continue reading. The line of script was continuous across both her thighs. He looked up at Angel, and she pushed him off with her hand, willing him to go on. His eyes found Zoya's, looking helpless for the first time since she'd met him. Zoya slipped her own hand under Angel's head, cradling it.

Seeing that, Wolf began moving down the length of Angel's body, continuing to read. Zoya could barely hear his voice.

But there is a girl, Kellian. Who could help her. She is somewhere. I've heard her voice. Now hear mine. I'm ready to die. Please.

Angel groaned as Zoya adjusted her hand behind the woman's head. It was then that Zoya noticed that Angel's upper back was stuck onto Ice by threads of snow. The threads were crimson. Blood was flowing into Ice. It was killing Angel. The price of her tale was now clear.

Wolfs voice came like a thin trickle of melt:

That's all. I love you.

Angel was staring up into the sky, and her blue eyes were darkening to slate. There was no more script.

Wolf moved to brush the hair away from Angel's eyes, tuck-ing the long wisps of hair under her head. He saw the tubes plunging into Ice.

Snow Angel slowly, laboriously, turned the palm of her right hand to face outward. A fragile line began to carve its way from thumb to little finger.

Zoya could read it: Now is a good time, Wolf.

He picked up his knife, the slowest movement Zoya ever saw.

"Wolf," Zoya whispered.

He looked up at her with eyes grown white.

"Tell her something for me," she dared to say.

His voice came out like a rock breaking in half. "Speak to her," he whispered.

Zoya crept close to Snow Angel's face. She spoke: "Marja, I beg you, tell Ice that I am immortal. Tell Ice that Zoya lives very long." It was true in a way; but she might have said so anyway. She would dangle that before Ice. A decoy, a gamble.

Angel looked at her, comprehending, Zoya thought. But then her eyes closed. Her hand fell to her side.

She didn't know if Angel conveyed her message or not. Zoya pressed her hand to the artery at Angel's throat.

Wolf pulled off his jacket, covering Angel's torso. He bent over her, kissing her lips. The knife was firmly in hand.

Zoya stretched out her own hand to restrain him. She shook her head as he looked at her, looked through her.

"Ice has done the thing, Wolf."

He gazed back down at Snow Angel. She was dead.

In the deepening night, it was hard to see, but the writing on her skin was moving from red to purple, then to blue, freez-ing into scars.

A noise came from Wolf's throat, a groan. He touched Angel's hair, her face.

Zoya turned away. She rose to her feet.

Wolf laid his forehead on his wife's body. He became as im-mobile as Snow Angel herself.

Zoya stepped closer to him, taking hold of his harpoon gun.

He let her remove it. Then she stepped off a few paces, keeping guard, fully intending to launch a spear at anything that would interrupt Wolf.

And so she stood watch. She faced off against the sculpted, darkening bergs, thinking about Ice as an immortality ma-chine. What a strange, unearthly ambition: to live forever. Who would wish to outlive one's family, one's friends, one's time? When she'd encountered Lucian Orr—if she'd had her wits about her—she would have told him it was no prize, to live so long. It was better to have full moments than long ones. It was better to lie in a lover's arms, to grow old together. Dying couldn't be as bad as saying good-bye over and over again. Poor Lucian. She could have told him.

She looked outward, past the plateau, to the vanishing hori-zon. The entire landscape was the product of a tall, decaying man. His immortality ambition crushed, he finally sought death. A bad death.

When it was full dark, Wolf appeared at Zoya's side. He had rigged a travois for Snow Angel's body. Without words, they left the plateau, pulling their burden, finding their way by flash-light, through a plateau grown stiff and black.

All the paths led down and outward.

## **CHAPTER FIFTEEN**

—i—

Sister Gretchen ladled a dollop of gruel into Kellian's bowl. Next came the sugar sauce, metered out by Sister Odette.

Four long tables filled with postulants waited silently. Kellian, at the head of hers, sneaked a glance at the row upon row of bowed, shaved heads. At the other end of the table, Hilde raised her eyes long enough to flash malice at Kellian.

Hilde hadn't adjusted to another white robe at her dormi-tory, much less her table.

They dug into their cereal as Sister Roselyn, at her raised dais, began the morning lesson. Kellian hardly registered sis-ter's voice, droning on about moral identity as an ethical re-source. She pushed her spoon through the gruel, thinking about conversations with Ice.

Conversations. With Ice.

She felt the hairs on her arms lift into the wool of her sleeves. It was true. Though Sister Patricia Margaret didn't be-lieve her, Kellian knew she was speaking to Ice. Ice had passed her tests, solving equations in an instant. Breaking its millennia-long silence, Ice communicated using natural unen-crypted language. English.

It had all happened so fast: first, her obo-based program had found a chink in Ice's armor—or attracted Ice's interest. The simple queries appearing on her screen were almost child-like. Then, when she had downloaded her diaries, Ice absorbed them, displaying curiosity about the facts recorded there. Ice's queries demonstrated astonishing characteristics: integration of facts; making generalizations; asking questions. It displayed, Kellian thought, common sense. Ice appeared to be reasoning.

"... the monsters inside us," Sister was saying. "Caging our destructive impulses... the course of history..."

Down the table, Nit was nodding over her cereal, after being kept up half the night reciting her shortcomings in the chapel. No one was there to hear her recitation, but Kellian was sure Nit had faithfully recounted them.

Kellian managed to swallow a lump of the food-bender meal. But in her mind she was already at the node, talking with Ice.

She was the last one in the hall to notice that Sister Roselyn had changed the tenor of her speech.

The postulants were staring at Hilde.

Sister Roselyn was upset. "And this isn't the first time, young woman."

Kellian bent forward to ask Jace what was happening.

"Hilde," Jace whispered, looking stricken. "The nuns say she was found missing during bed check last night."

Bed check? If the nuns had made one of their random dorm checks, Kellian had slept right through it.

Every spoon in the room was laid down. But no head turned.

The gruel curdled in Kellian's stomach. Hilde was on the precipice. You couldn't tell by looking at her, with her serene face, but the nuns would soon crack that facade. Out of that crack would issue the truth

about Hilde and Daniel.

Damn, Kellian didn't have time for this. Ice waited.

Hilde was caught in Sister Roselyn's accusatory stare. "Well?" Sister demanded. "Surely there is an innocent explanation for such an absence?" But by the look on her face, she didn't think so. "Stand, Postulant Hilde."

Hilde rose to her feet like a log that had been long pushed underwater.

And as she stood, Kellian also stood, anchoring the other end of the table.

Sister Roselyn shot Kellian a frown that would have wounded if it had been a stone. "Sit down, Kellian."

"But Sister, Hilde was with me."

Nit stared in dismay, then stretched under the table to kick her in the shins.

Sisters face twisted. "I think not, postulant. You were in your bunk."

Kellian groped for ideas, fast. "Forgive me, Sister, but we both were gone, up on the ramparts." She was standing on the edge with Hilde. Kellian felt suspended over a frozen land. She waited.

Sister Roselyn glanced at Hilde, then back at Kellian.

Kellian blurted, "To see the light show. Ria's lights." And she did hope to God that the aurora was up and running last night.

Another sister was whispering in Sister Roselyn's ear. "I'm told you were in bed."

Kellian shrugged. "Must have been my pillow they mis-took." Across the table, Nit looked like she might faint into her gruel.

Then Hilde spoke up, her voice strong in the drafty hall. "It was my idea, Sister. 1 take the blame." Despite her peril, Hilde didn't look the least afraid. Kellian hoped *she* didn't, either.

Sister Roselyn gazed at the two of them a long while. Then she said, "So you two were cavorting up on the ramparts like brown-robed youngsters?"

Kellian tried an ingenuous blink: "A little beauty, Sister. We work hard. We wanted to see the aurora."

"You don't work hard enough if you have time for such pranks." But the starch was gone from Sister Roselyn. She grum-bled, "I never heard you and Hilde were such fast friends."

Hilde's eyes were carefully cast down. "We've made our peace, Sister."

Kellian snapped a look down the table at her, saying in a voice for the table only, "Nit too?"

Hilde's face tightened, but she murmured, "Yes, Nit too."

It was late in the afternoon when Kellian and Hilde finished their penance and arrived at the north wing, hands raw from soap suds and lye.

Turning from a work node, Nit came face-to-face with Hilde.

Hilde looked at her with an even face. "How's the work go-ing, Nit?"

Nit raised her chin. "As fine as ever." Then she added, "Wel-come back."

Not quite bringing herself to smile, Hilde nodded. She moved into the work area, and the postulants greeted her with genuine warmth.

Kellian murmured, "Don't push her, Nit. She has her pride."

"But you tamed the dragon." Nit was looking at her with something akin to worship.

Kellian saw herself for a moment through Nit's eyes: Smart, assured, daring... It was an unaccustomed thing, to have such admiration. She hoped she deserved some of it.

She put a hand on the girl's shoulder. "Keep an eye out, Nit, I have work to do."

So Nit stood guard, pretending to be busy but keeping a lookout for the nuns, who were absent today, conclaving over who would take over Sister Patricia Margaret's stewardship.

Kellian began on the keyboard: Kellian Bourassa is here.

Immediately, as though Ice had been expecting her, the words came: Describe what you call snow witches.

Kellian never knew what Ice would say. This one surprised her. Of all that her diary contained, snow witches were the least of it.

Snow witches are deformed. Monsters. They travel the barrens and murder to eat.

The words appeared: Monsters are not human. Snow witches are free to roam, to go about their tasks, to take sus-tenance. They are not monsters. They are human.

Bad humans, then. Kellian typed furiously. What do you have to do with them?

What is a bad human?

Kellian wiped her hands on her robe. How was she to an-swer such a question? She began to wonder if she was capable of this. But she plunged on, because she couldn't bear not to. She'd told Mother Solange; her duty stopped at that. She keyed: *Bad humans are ones that cause suffering. On purpose* 

What is suffering?

Kellian paused. Then: You read my diaries. Life in the preserve, that is suffering.

What in the preserve is suffering?

She sat, concentrating. There were so many examples. She picked one, still vivid. When the Evret preserve died on its way across the barrens to our preserve. And we had friends there. And we grieved for their deaths. We suffered.

You lived.

Kellian could only type, We loved them.

Your preserve loved the other preserve.

I'm saying some of us loved some of the others. We suffered alone, as individuals. My Aunt Selba

died on the barrens. My mother cried for weeks. Kellian felt a knot grow in her stomach. Could Ice be so ignorant?

Why did Aunt Selba die on the barrens?

She starved to death, because our preserve couldn't take them in, because we had only enough food for ourselves. She died on the sur-face, where there was nothing to eat.

There are food benders.

Sometimes they break.

Humans can fix food benders.

Kellian clenched her teeth. Not always.

Your preserve didn't help Aunt 5elba. Your preserve knew that was wrong?

*Yes.* Kellian could see it coming, and sure enough:

Are you monsters?

No. We did the best we could. We had a dilemma. We could save them for a few days, but then all of us might starve.

Your preserve solved the dilemma by letting them die?

Kellian had to answer, Yes.

There is nothing to eat on the surface?

Truly, Ice was very ignorant of some things. Intelligent, but stupid about the world. *There are rats. And we grow algae on the ice paddies. And the snow witches eat humans, if they can catch them.* She typed furiously. *How do snow witches occur?* 

They are developed over time.

By who?

This one.

What is this one?

This one is the one that develops snow witches. After a pause, it continued: This one is the one that wonders if they are bad.

Why do you want to know?

A fraction of a second of a pause.

Hurry up, please, it's time

Kellian frowned, peering closely at the screen.

hurry up, please, it's time, hurry up, please.

it's time, hurry up, please, it's

The screen scrolled and scrolled. It responded no further. Kellian sat back, rubbing her eyes with the heels of her hands.

Time for what, she wondered.

--2---

Swan followed the light.

The paths through Error's Rock were dark, but up ahead was a light. He stumbled out of the fissure into a slap of wind off the night landscape. And there was his lantern.

Its glow pushed back the night a meter or two, and he knelt by it, grateful for its simple comfort. All through the descent from the top, hope had been forcing its way back through him, pushing into the cracks.

The thing that Zoya said. That the witch said that she said: I am immortal.

Had the ship discovered such secrets among the stars? Had they in fact been searching for it, and with their damnable gypsy luck, found it? Yes, it made sense. They had no children, as Solange attested. Just how long *did* they live?

It would have saved a lot of trouble if the ship had revealed this sooner. Perhaps the treatment was resource intensive, and they meant to keep it for themselves. OK, even so, he had plenty to trade with: the power over Ice's growth. The power to stop it, and to preserve the remaining lands. It wasn't as though he *wanted* to ruin things. It was collateral damage—not ideal...

He placed his lantern on the sled, so that it would cast a nim-bus of light around him as he traveled by night. Then, checking with Ice for the path that Zoya's sled had taken, he pointed his own sled in that direction, heading back for the mainland.

They had taken the body of the snow witch, the one they used to interface with Ice. That had been shrewd, persuading a witch to interface for them. It must have been Solange's own purpose with those nuns resting in Ice—pathetic and hopeless maneuver that it was. Ice's encryption easily deflected all inter-face attempts, whether of the foretellers, the nuns, or the ship's technicians. Until now, until this one snow witch...

With encryption in danger of failing, Ice killed the witch, as programmed. But still, it was a clever scheme. The gypsy rose in his estimation. Zoya Kundara was becoming deeply ambigu-ous—beautiful, deadly, immortal, carrier of disease. He would have to straighten all this out.

But first he had to catch her.

She and her companion would be afraid of him now. He shouldn't have threatened her. That business with the last-resort program. Premature. So much had changed in the space of an hour. Solange Arnaud, for example. He didn't need Solange anymore, now that the ship must at all costs be pre-served, not destroyed.

Behind him, Error's Rock began to glow faintly, as though it took heart just having him gone. Damn the machine, anyway. He could hear it thinking: Must go global. Mustn't go global. Must. Mustn't. It chugged away, stewing in its loops.

It didn't matter. He was reprieved.

He whooped out loud, and his voice skated across Ice, forever.

Kellian lay awake in her bunk, listening to the deep silence of the nunnery. Beyond the nighttime sounds of the dormitory, underneath the muttered dreams and toss of wool covers, was the vast quiet of the fortress.

Somewhere in the Zoft, Kellian's friend, Sister Patricia

Margaret, rested or fretted, silently. No one listened to her mentor anymore, if they ever had. Nor could Kellian rouse Sister Patricia Margaret from her preoccupations to listen to a young postulant who the sister thought was teetering on the brink of a great fall.

In the bunk above her, lay Nit. Nit, whom the nuns had taught so well to keep quiet.

A far-off bass hum. It came from deep in the stones of the place. Or perhaps from Ice itself. It ceased, and silence re-turned. Kellian punched her pillow into a better shape and turned over.

Ice had broken its long silence, but she almost wished it hadn't. What was she dealing with, she wondered. What man-ner of device or being, or something in between? It was capable of reasoning. It was, incredibly, paying attention to the value of things. It seemed unaware that people were starving in its bar-ren domain. That its creations—its admitted creations—slew people and spread terror. Well, Daniel had tried to tell her. She wished now that she'd questioned him more thoroughly. What purpose, what design, had been implanted in Ice, or grown there over time? How could such powers be diverted—wasted—on beings such as snow witches? Ice itself was dis-turbed by the implications. *Disturbed... implications*. These were not words she could ever have imagined using in regard to Ice.

And what was her relation to Ice and its *implications*? Had she lain down with rats, indeed? Could she mine its knowledge and ignore its crimes? It was as corrupt as the Sisters of Delusion. And she was their handmaiden.

Another deep hum. The Keep was restless that night.

Sleep was impossible. Throwing off the covers, she fumbled for her shoes and laced them in a hurry. It was easy to dress. The white robe was hanging on a peg on her bunk.

The corridor stretched empty in both directions. Conserv-ing power, lights were dim, and shadowed doors stitched a black thread down the entire wing. The mansion of the nuns was in sleep mode. But Kellian knew the sisters patrolled. She would not go far, just stretch her legs...

A deeper hum floated down the great hall. If she had not been listening for the nuns, she might never have heard its muted note. And then again. But it was more than a vibration, it was a muffled baritone cry.

Her feet turned to follow it, while her mind scolded, Go back to bed. Overruled.

This was very bad, to be abroad past midnight, just the thing for which Sister Roselyn had scolded her, but forgave, af-ter good penance. Nevertheless, she continued on, thinking of Daniel and what he knew. Where the corridor turned, there was the back room that led to a small foyer from which she had accessed the roof. The dark foyer had another door, one that Nit had said led down. This was the route that Kellian had been ignoring since she had arrived at the Keep. She had gone up, and north, even carried messages to the west wing. But never had she gone down. And now she knew why.

Because it was the source of the midnight sounds. It was the source of the things that Daniel knew, that

she didn't want to know. She was split nearly in two with longing to know and not to know.

The door was unlocked. Of course, because the brothers passed freely on their errands, and their errands were many.

Down the smooth, well-worn steps, down she went. Tread-ing softly. Perhaps this was the route Hilde took to Daniel's arms, or there might be other stairs, known to some, known to everyone but her. At the bottom of the stairs was another door. She opened it, looking out into the fourth wing, the nether world of the Keep.

It hardly looked like the mansion above it. Gone was the lavish woodwork, the fine wood of the floors, the tall, chande-liered ceilings. Everything was simple, functional, and ugly. How much she had changed in the short weeks since her ar-rival, to think this place was ugly.

A loud moan surged from somewhere nearby. A groan of pain.

As she stepped out of the doorway, a movement caught her eye. She dived back behind the door, and peered from the smallest possible opening. Nuns. Two nuns emerged from a portico, and hurried down the hall, away from Kellian. That startled her. Were they visiting lovers? They disappeared around a corner.

Now would be a very good time to turn back and sneak into her bed.

Instead, Kellian stepped into the corridor, where dreadful screams assaulted her ears.

Voices and cries came from the door from which the nuns had emerged. Kellian moved to this door, the source of the in-creasingly terrible cries. Her hand was on the door latch. But what would she do? Enter the room and inquire as to the noise?

Voices near the door. She jerked away. Rushing to the adja-cent doorway, she released the latch, and slipped into the room. It was unlit except for the brilliance of a high, glowing wall.

It was a windowpane onto another room.

A room with a bleeding body. On a table. She caught the frame of the window, steadying herself. Where had all the blood come from? The floor around a table was sloppy with blood. Several brothers were bent over the table. On the table, naked feet protruded from the gathering of brown robes.

A brother stepped away.

She suddenly had a clear view, one that punched her in the chest, robbing her of breath.

A man with long black, very long black hair, lay on the metal table, naked except for a cloth covering his groin. He was bound. By his mottled skin and his long hair, he was a snow witch. His arms were raised on elevated arm pads where his wrists were secured. His arms were flayed open.

She saw a brother bend low with a tiny knife, the brother with the eyeglass fixed to his forehead, and the knife went in. As the man howled, so did Kellian. Her voice was amplified, echoing through the surgery next door. Every head jerked to attention, while the man on the table shrieked with renewed volume.

Just as the brothers turned to rush from the room, the snow witch rose from the table, and in a mighty yank, burst his bonds. The room turned to chaos as the brothers tried to re-strain him, slipping on the bloody floor.

The surgeon turned to the window for a moment. It was not a brother, but a nun.

Kellian fled the room. She ran, crashing out the door just in time to see the snow witch in the corridor, fending off the brothers. With an arm streaming blood, the witch threw a brother against the wall. The witch's tormentors piled on him, and yet could not prevent him from hurling them off and run-ning up the stairs, the very ones down which Kellian had just come.

Now the hall was reverberating with cries of nuns and brothers. The nun from the surgery barked orders as brothers poured into the hallway from many doors. In the crowd, Kellian pulled away from a nun who had grabbed at her robe. She ran up the stairs amid brothers armed with weapons.

She must flee, the nuns had seen her, recognized her. She Lifted her robes and climbed, two stairs at a time, amid the brown swarm of men. At the top, the brothers scattered in all directions. She ran down the main corridor. Everyone was emerging from the dormitory doors, but they huddled there, stunned, watching the melee of brothers. Kellian hid herself among a tight pack of the brothers. Her lungs were afire. She ducked into a portico to catch her breath. Brothers streamed by, feet pounding, voices shouting.

A gong cut through the shouts, tolling, tolling. It calmed her, that deep bell. She was certain her punishment would be severe; one that would silence her, no doubt. The nuns had kept their ugly secret: it wasn't the brothers who tortured the snow witches. It was the nuns. But there was nowhere to es-cape to. Sister Patricia Margaret couldn't save her now, no one could.

The thought was surprisingly neutral.

She walked across the hallway to the sanctuary. Let them find her in prayer. Then they could turn her out for prayer as well as mayhem.

Kellian closed the sanctuary door behind her. She looked up.

He was hanging there, swaying in his rope noose, from the holo projector anchored in the ceiling. But this was no projection of ancient piety. Nor was it an animal-like snow witch. It was a man with torn and bleeding arms, wearing only a loin-cloth. A human being who could bleed, suffer, and die.

Kellian was under him, trying to lift him, but he was too high. When she embraced his legs and pushed upward, his knees buckled. He was dead. The face that she had seen erupt-ing with pain now lay steeply tilted to one side, silent.

She sank to the floor.

Warm blood dripped onto her head. *Oh, mother*, she thought. *Oh, sister, mother, brother*. It was all mixed up together. How would she ever untangle all the words?

She wept.

After a time they found her. People came in. She heard noises. The brothers were nearby, but they wouldn't touch her. At last a familiar voice bid her rise. Mother Superior stood amid a cluster of nuns, commanding her to rise and come for-ward.

Kellian would have obeyed, but she couldn't muster the strength. She looked down at her arms, at her lap. Her white robe was everywhere stained bright red. But white would no longer be her color, in any case.

She was glad to have done with it.

## **CHAPTER SIXTEEN**



They sped across the Paz in a blinding clear dawn.

They had driven through the last of the night, and increased speed as visibility allowed. Zoya had tucked her small, heated blanket around Wolf, and secured it in place by standing next to him, holding it. But Wolf drove the sled with single-minded abandon, careless of the wind's scalpel. She was glad for his haste. The tall witch had looked in her eyes and said, I *invoke it*. She believed him, believed that he would, hoped he'd delay.

But she knew why he would call for a clean end in fire. The colossal failure of his immortality machine. She turned around from time to look for another sled. Nothing in that di-rection.

Behind them on the second sled was Snow Angel's body, the fur of her wrap fluttering in the wind. When they set out from Error's Rock, Zoya had suggested that Wolf should keep his jacket. She didn't bring the matter up again.

Their direction was southwest, down the strait into the Val Paz, heading at last for the Keep. Now, more than ever, the Keep. *The girl Kellian can help*. Snow Angel didn't know where the girl was. But Zoya did. First, however, there was something they had to do. She and Wolf both kept a sharp outlook for what was needed.

The fissure.

They found it shortly after sunrise.

Its depths gleamed turquoise in the deep slant of light. One of the plunging sides revealed a crystalline face that was evenly striated, vertically. On the other side, the crevasse was clear and hard, a brighter shade of blue-green. Different crystal planes had different properties, Lieutenant Mirran had said once. Some varied continuously with the direction of the atomic structure of the crystal. Ice displayed its complexity in this mammoth crack. It could be hard, soft, conduct light differ-ently. Could be lovely or awful, welcoming or deadly. It was now to be a burial chamber, as Wolf carried his wife's body to the crevasse.

Zoya wondered if a prayer was in order. She could offer one, and it would be heartfelt. But Wolf stood silently, holding his wife in her furs, perhaps offering his own prayers.

She hated herself for the next thought she had: Were the di-amonds still in the jacket pocket? She knew that fur jacket was going with Snow Angel. But at that moment she could not, could not even begin to, open her mouth and mention such a thing.

Then, in a slow and steady display of strength, Wolf knelt and bent forward, holding Snow Angel over the crevasse with just his forearms. She was not to hit the sides as she went down.

Nor did she. Straight down she went, and the only sound was a quiet flutter of air; nor thankfully, did they even hear her hit bottom.

Zoya felt the cold tracks of tears on her face. Angel wasn't hers to mourn. But she always cried at funerals; it was so good to cry. Wolf was at her side. He handed her a kerchief. Grate-fully, she wiped her face, returning the rag.

Then, walking down a few meters to a narrowing of the fis-sure, Wolf built a small bridge with struts and

planks from his pile of trade goods. They coaxed the sled over it, then dismantled the bridge and restowed the materials on the cargo sled. Lucian Orr would have to build his own.

With her radio stowed near her feet, Zoya kept glancing at it, deciding to call, and then deciding not to call. She had an ugly feeling that Anatolly was losing control of Ship. With Janos in charge of *transition*, was the first mate, the new com-mander, in charge of *her*? Well, she couldn't be accused of in-subordination if she didn't hear any orders.

Wolf had not made a move to restart the sled. He was look-ing at Zoya.

"She didn't take them," he said.

Zoya blinked. Wolf's hand was resting on the steering wheel, but he wasn't starting out yet. He opened his other hand. Something sparkled there.

It was a shock to see her stones lying there. Instinctively, she put her hand to her left ear.

The two diamonds rolled into one of the deep creases in his palm. "Take them," he said. "They're yours."

"Wolf..." she said, overcome. She had traded them for value, fair and square. And she thought they'd gone with Snow Angel.

He watched her hesitate. Then he shrugged. "You traded them too easily." She shot him a look, but his tone was gentle. "I would have given you a ride anyway."

His words pricked at her, and she knew why. Her mother's diamonds. Her grandmother's diamonds. Nothing was worth that trade. Why had she ever thought so?

She took hold of them. With hands numbed by a sharp wind, she pierced her ears with the studs and carefully screwed the backings into place. She patted her ear, the comforting pro-trusions. The right number, four. Her eyes clouded over. He gave her the kerchief again, and she blew her nose. "Thank you," she said, her voice hoarse. It covered a lot of things, that thank you. But she didn't need to say it. He seemed to know a lot of things without words, and besides, she didn't trust her voice.

"The holes didn't look too good," he said, giving her an ap-praising gaze.

He started the sled, and they slowly moved off, away from the great fissure.

The cold air immediately cleared her eyes and sinuses. Her mood lifted, despite all their troubles.

Wolf glanced at her. "I'm glad you didn't take my sled." He cocked his head toward the north. "Back there." Back at the preserve.

She kept a neutral face. She certainly wasn't going to admit anything. Apparently she didn't need to.

"I would have had to come after you," he said.

Zoya looked at him with narrow eyes and saw the smile buried in his beard.

They headed out, down the Val Paz, slowly increasing speed. The ambient temperature was warmer than it had been for the last few days, but at a fast clip, the cold bit into some-one without a jacket. To the west, the great pale forest rumpled the horizon. They would stay to the east of the Taga, for speed.

"How long?" she asked Wolf as they cruised on.

"Five hours."

It was the last thing he said for a very long while. As they bumped along, she managed to break out her tube food, but Wolf shook his head. She rummaged for his jerky, and he took a piece, but tucked it into a hip pocket. He was in danger of the cold more than hunger, she knew, though she had gotten him to agree to tuck her heated socks into his shirt, so his core tem-perature might not suffer.

He was slowing down. Then he stopped and killed the motor.

Zoya lost the zone she'd been in, the traveler's suspension. But she snapped back quickly. "Wolf?"

He turned around slowly, his eyes unfocused. He was listen-ing. Zoya hardly breathed.

Jumping down from his perch, he began rattling on some-thing behind the main sled.

"What is it?" Zoya asked. She heard a thunk.

Wolf had uncoupled the pack sled from the main sled.

He looked up at her. "The one who chases you."

She nodded. So they were being followed.

"Getting closer, now."

She looked at the cargo sled. "But Wolf, your trade goods, everything you've worked for!"

He jumped back up onto the sled. "Sit down and hold on."

Under his gaze, she obeyed. Then he pressed down the ac-celerator pedal and they lurched forward. Kilos lighter, the sled lifted its nose and crashed into the wind.

It had been an hour since either Zoya or Wolf had spoken a word. They were heading south, cutting a path between the mountain remnants—still proud ranges despite all that Ice could do. Zoya held a blanket around Wolf's shoulders. Leav-ing the jacket behind was a terrible mistake. She should have prevented it.

But Wolf had withdrawn himself from the cold. She be-lieved him when he told her he couldn't feel it. He drove like a man possessed, while behind them, not visible, but apparently audible to Wolf, the tall witch drew closer.

By midmorning, they were forced to stop. A motor traction spike had broken. Wolf lay down on the ground, working furi-ously to replace it.

As he worked, Wolf said, "We could take a stand against this pursuer. It's two guns to one. Maybe we should fight." His eyes flashed up at her, gauging her.

"How do you know he's alone?" Zoya asked.

Wolf stood, slapping snow from his legs. "Witches don't hunt together."

She scanned the north horizon with her field scope. Nothing.

"To outrun him, we have to head straight for the Zoft," Wolf said, climbing onboard. "I usually cut to the east here. To avoid that." He nodded in the direction of Seetol, as he called it.

"Anything can hide there," Wolf said. He watched her, waiting.

Zoya realized that Wolf was worried.

"You could call your friends," he said.

But calling Lieutenant Mirran wasn't an option. He couldn't get there in time to help. And she didn't trust him. "Let's push on," she said. "Fight if we have to."

"You'll have to," he murmured. "If you want to destroy Ice, you'll have to."

He seldom alluded to her mission. She didn't even know if he approved of it. "You think I can destroy it?"

He looked at her, rather longer than she was used to. His eyes were crusted by rime. "Isn't that what you came home for?"

It was a tacit approval. She was grateful for it. These Ice fields were his lands, his world. But the talk of destroying Ice raised a more disturbing thought: The cure could kill.

As he started the sled, she said, "First I'll talk to the nuns."

"They're good at talking," he said. They were off, moving to cruising speed.

"So am I."

She saw him smile. "I know."

Before long, the skewed towers of the megalopolis could be seen in the south. Like fingers pointing in all directions. The incursion of Ice had slowly twisted the great office towers until they were tilted and aslant. Ten thousand years and Ice still hadn't brought it all down. The city wouldn't have looked so terrible if it had.

The Keep, Wolf said, was due east of the ruins. In the time before Ice, there had been satellite cities east of Seattle. She couldn't remember their names. But one had been the site of a center of technology.

Wolf had slowed, turning his head, listening. "Sounds odd," he said. He cocked his head back toward their pursuer. "The sled sounds odd."

In the distance, Zoya saw a palisade like a valley wall. "Is it there?" she asked, thinking of how Wolf had described the vicinity of the Keep. "Is that the Zoftian Rise?"

But Wolf ignored her question. "Give me your scope," he said. When she did, he took her hand and put it on the steer-ing wheel. "Steer," he said.

She gripped the wheel, and Wolf managed to turn around enough—with his foot still on the accelerator—to peer through the scope. Then he took over the steering wheel and handed the scope back to her.

"Ditch the supplies," he said.

They were pounding along at a reckless speed already. But Wolf was determined to lighten the load.

She began tossing out the few things they had left, the last few things stowed in her seating area, all except her pack with the ra-dio. As she pitched their supplies, she glanced up to see, at last, a small

black form in the distance. The tall witch and his sled.

Then Wolf kicked the last of the reserves out of the motor, and they were flying over the Ice. The open sled wasn't made for safety or speed. Zoya hung on, praying not to hit a stray facet of crystal or a hidden fissure.

When she checked behind them once more, she saw that the tall witch had stopped at the crest of the last hill. In front of them, she could see a dark shape against the Ice escarpment. The nunnery. Behind the fortress, the uplifted wall of Ice presented a daunting cross section of quasi-crystal: at this distance, a robin's-egg blue, filled with the glancing light of a westering sun.

Maybe the witch didn't dare approach it. Or maybe they had outrun him. "He's stopped," she called to Wolf. She was hold-ing on for all she was worth. "Slow down."

Wolf's gaze was turned to the side, toward the ruined city.

For the first time since she'd known him, Wolf's face showed alarm.

His arm came around her, and he held her tightly, in a strangely out-of-place embrace. "I'm a fool," he murmured next to her cheek.

Then he released her. "Sit down," he said.

She did. The sled was pounding so hard she had to.

He pointed off toward the city. At first she could see noth-ing, but after focusing, she discerned a dark crest along the western horizon. She could only hold on to the back of the sled and stare. The line grew to a thick stripe. Then she saw that it was undulating.

"I'm a fool." He set his mouth. "The sound. It wasn't the sled. It was the pack."

That couldn't be right. The line stretched for kilometers north and south in front of the city. How could this be a pack? It was a sea.

She turned in the other direction and began to gauge the distance to the Zoftian Rise, and the Keep.

Wolf was pointing toward the escarpment. "See? There it is."

She did see, a block of slate gray against the shelf of Ice. It was so small, the size of her thumb held in front of her face.

He made a graceful swerve of the sled, and they began cruis-ing directly toward the Keep, the runners skating over hillocks, the two of them riding the sled like a jetted toboggan.

"Zoya," Wolf said. "Now listen." He kept his eyes straight ahead. Behind them for the first time, Zoya could hear the scrambling patter of rats, a storm of squeals. The sound was more chilling than the sight of their growing mass.

He reached down and carefully pulled her to her feet. "Are you listening?"

"Yes, Wolf."

"You'll do exactly as I say?" She nodded, and he nodded too.

"I'm going to let you off. When I do, you start running."

Her insides clenched together. Off?

"No hesitation, just run." When she didn't answer, he spared her a look. "Zoya, I am going to draw them off. Now."

"No."

He turned on her fiercely. "Yes." He nodded at her, slowly. His eyes said everything. There would be no argument. She reached for her pack, pulling it over her shoulders.

"Leave the pack," he said. But she paid no attention.

The Keep was growing in her sight. Blacker, taller. It was too far to run, surely.

"I will stop now," Wolf said. "Will you run?" He watched her until she answered.

"Yes." She whispered it, nodding.

"Run for the Zoft, Ship Mother. Run very hard."

By the sound of the motor, he was slowing. Her mind had turned to white terror. "Wolf," she said. "Don't go." Tears froze as soon as they slipped free of her eyes.

"I'll outrun them. It's a fast sled." He stopped the sled. "Now run."

He gave her a shove, just enough to propel her off her perch. She was immobile for a moment, long enough to see him start the sled again, silhouetted against a brown backdrop of moving rats.

Then she was running, looking behind her. And Wolf wasn't outrunning the pack. He was driving toward them.

*No, Wolf,* she thought. And then: *I have lived too long*.

But she promised him she would run, and so she raced to-ward the fortress, toward the looming mass of black. There were great pillars in the center. She headed toward them.

On the battlements of the great Keep, she saw figures moving.

Sister Helene stood next to Solange on the roof, viewing the drama below. "A large mass, Mother Superior," she said.

Solange nodded. It was the full pack this time, an impres-sive herd.

"This must have been a good breeding year," Sister Helene observed.

Again, Solange nodded. Her attention was fixed on the tracker and his sled speeding directly into the leading edge of the swarm. He was giving his passenger time to run. But he himself was out of time.

"That was a man who provided us witches," Solange mur-mured.

"Yes, Mother. He was an excellent tracker."

A woman was dashing for the Keep. She seemed to be yelling something at them. That wouldn't be imprecations, one could hope. Zoya Kundara had nothing to blame them for. They didn't control the pack.

The tracker's sled plunged into the mass of rats.

Solange had a sudden, unworthy thought. That it might be best if Zoya Kundara met her end now, on the barrens, with her driver. There was no guaranteeing, not even very good odds, that Zoya could be won over to the order. It might be best not to extricate her from the predicament she'd gotten herself into. Ship would never know the truth of her demise.

Sister Helene looked at her superior, a slight furrow of worry between her eyes. "Shall I have the doors opened?"

On the other hand, Solange thought, Why create a martyr? The woman's moral authority could outlast her.

"The doors, Mother?"

Solange watched the dark-haired woman run, the pack close behind. It was a moral dilemma.

One could argue both sides.

Zoya's legs were weary already. Behind her, the ocean of rats was flowing, flowing. She heard the cluttering of rats, the buzz of Wolfs sled running to meet them.

She was within shouting distance of the Keep. She raised her head at a steep angle to see the black figures massing there.

"Help us!" she called. "Help him!"

She could see they were black-robed nuns. But they stood on the ramparts without moving. They observed her.

Now she could make out the great door between the pillars. The door was closed, and she ran toward it, willing her legs to pump under her, though all their strength was gone. She was under the massive portico. She stumbled toward the doors. Beat against them with her fists. She turned, slumped against the doors. The rats were swarming out there, but not closing on her.

They were boiling around Wolf.

Zoya cried out to the doors, to the battlements, "Help him! I beg you, help him!"

Then the sled was overrun. The brown sea swept over it.

Zoya beat on the door; her hand felt broken. She was beat-ing on the swarm of rats, beating them off, crying out.

A phalanx of rats peeled off the main mass and rushed to-ward her, as the door opened the barest fraction. Hands were pulling her inside.

The door slammed shut with the sound of hell closing for the day.

Zoya looked up into the face of a Sister of Clarity. The sister flinched as the rats hit the door with full force.

"Just in time," the nun said.

The words skittered off Zoya's ears.

Ice. All she felt was ice.

### **PART III**

# **Burning Bright**

#### **CHAPTER SEVENTEEN**



Swan lay on his belly and peered over the top of the rise, watching as Zoya Kundara disappeared inside the fortress. An undulation of rats rolled up against the great doors and back again.

The whole tundra bore a coat of brown fur, and resounded with chittering. A writhing mound in front of the Keep marked where the sled had overturned. Swan hoped the fellow had died quickly in the crash.

Deprived of half their hoped-for meal, the army of rodents swarmed and milled on the plain. They were still hungry. He could empathize.

He scanned the impressive edifice before him. Solange had a showy residence. She might have been a powerful ally. It might well have been a partnership to contend with, he and she. He did like the look of her retreat. Clean. Permanent. Strong. But the two of them no longer shared a common vision. She wished to preserve Ice, and he no longer cared.

A motion to one side caught his attention. It was a rodent. It had crept up on him, and now crouched a half meter away, frozen in surprise, whiskers quivering.

In dread, he looked around him. But the creature was alone. Beady eyes regarded him with intense interest, the interest of an animal accustomed to thinking of people as food. Well, he

*could* turn the tables on the beast... But he began moving away from the rat, back down the hill toward his sled.

It was time to leave. Mounting the sled, he took a last look at the rise behind him. The rat was still there, watching him.

The loss of Zoya was only a temporary setback. He didn't need her specifically. He would bargain with the ship, if they were loath to share. They wanted to dissolve Ice. He didn't know how to do that, but he could program Ice to think about it. Ice could give over the whole of Error's Rock to the question of dissolution. That was fitting. Plan your own demise, Look-ing Glass.

The ship's crew was coming to a meeting with the nuns. This Lieutenant Jozsef Mirran was meeting with them for the handover of the children, up near Ancou preserve. Yes, it would suit.

He drove hard, putting as much distance as possible be-tween himself and the brown hoard.

It was a bad way the sled driver had died. Swan did wonder how the gypsy woman convinced the driver to do it. Perhaps this Zoya Kundara was a persuasive woman.

Between the gypsy and the nun it might be a very good con-test. For himself—from what he'd seen of both of them—he'd put his money on Solange.



"You are Sister Patricia Margaret." Pulling on her boots, Zoya glanced up at the woman, the nun whom

she'd met at the pre-serve, the one with a fondness for Seneca.

The sister nodded. She dropped the key to Zoya's quarters into a pocket in her voluminous robe.

"What time of day is it? How long have I slept?" No win-dows, no clocks.

"It's dawn. You slept a day and a night." She said it as though it were a weakness, to sleep so hard.

You haven't seen anything, if you think *that's* a long time. She found her anger returning, against this nun, against all of them. For watching from the ramparts as the pack struck.

Her eyes must have hardened, because Sister Patricia Margaret said, "Shall we cremate his remains? He would have wanted that. It was his custom."

Zoya rose, straightening her jacket. "I don't think you know his custom." She was surprised her voice was so even. "I'll take his remains, if you'll bring them here."

"We will not bring pack-kill inside the Keep."

A beat. Zoya wouldn't waste time on this woman. Mother Superior waited. Leader of the pack.

The sister led her into the corridor of the palace. Zoya didn't stare at the overscale luxury. This was earth. Even under duress, it could bestow grandeur and embellishment. If you were a Sister of Clarity.

Sister Patricia Margaret murmured, "There was nothing we could do, you know."

They were conversing in New English. Zoya judged it politic to offer that courtesy. It might be one of the few she felt inclined to offer.

They approached the great hall where she had first entered, staggering, freezing. Hating them. "You watched him die. From your safe roof."

"The vermin horde has ever been our first line of defense. But we don't control them."

"You hesitated to open the doors."

"We didn't know who you were. We have to be careful."

Zoya allowed herself to look the sister in the eye. "Careful of two people on a sled?" Mother of Christ, that was the very rea-son she'd arrived by sled and not by shuttle. And now the price was paid. Oh Wolf. It was a price I never would have willingly paid.

The corridor ballooned into a cavernous entrance hall, with a scattering of robed women in black, brown, and gray. Younger women had shaved heads, downcast eyes. Cowed and miserable, the lot of them. And a few were men, hooded, but male, she thought by their build.

Great doors flanked one side, leading onto the barrens. On the opposite side were smaller doors—though still massive—leading somewhere else. Overhead, a graceful dome peaked in a circular window lit with sun.

The sister's cane cracked a steady beat across this floor of marble tiles. Noting Zoya's gaze, she said, "We call it Ice's eye."

Zoya thought that Father Donicetti would hate that parody of a cathedral's God's eye. But he no doubt disapproved of the sisters entirely.

Amid the bustle of the foyer, Zoya saw a figure in brown rushing toward them.

A dark young woman, no more than fifteen, pushed close. "Please, Zoya Kundara, help us. She's to be excommunicated."

When Sister Patricia Margaret spoke, the girl flinched. "That will do, postulant. Join your group before I call Hilde."

"Who?" Zoya asked the shaven girl.

"Kellian. She'll die." Her eyes flashed darkly to the sister. "You abandoned her. Everyone's abandoned her, the smartest and best of us. You know she is."

Sister Patricia Margaret's cane came up into the air, and a man in a brown robe hurried to her side. At her gesture, his hand clamped around the girl's arm, restraining her as Zoya and the sister continued across the rotunda.

"Kellian Bourassa?" Zoya asked, keeping her voice even, hiding her sudden alarm. "I never knew excommunication was execution."

"And you don't know it now," Sister Patricia Margaret said. "She'll be put outside. She could survive."

Zoya had just seen how outside could kill. "When?" Look-ing behind her, she saw the postulant's imploring face, still watching her from the middle of the hall.

"In a few days." A ripple of concern broke through the nun's placidity. "But she chose to come, and chose to break the rules."

"What rules?"

"None of your concern."

They stood before a small, ornate door on one side of the rotunda. "The Hall of Honors," Sister Patricia Margaret an-nounced.

Zoya wondered how they could find honor in sending a young woman to her death for breaking rules. And how she could stop them.

Sister opened the carved door, ushering Zoya into an empty, circular room. A nun stood in the center, illumined by the roseate glow of a spotlight. Solange Arnaud no doubt.

"What shall I call her?" she muttered to her escort.

"Mother Superior is customary." The sister left, closing the door behind her.

As Zoya approached, Mother Superior Solange Arnaud turned toward her. Slim, patrician, hair gone to silver, high cheekbones, and the sort of complexion that looks superb in black. Zoya imagined the impression her own appearance con-veyed: filthy hair, sunburned face, bedraggled clothes. She had declined the offer of a clean brown robe.

Zoya drew herself taller and gave a respectful nod. "Mother Superior."

Solange Arnaud smiled, just enough. "Zoya Kundara. And by what title shall I call you, my dear?"

"Ship Mother."

"Charming. Our names are similar then."

"And not my dear, if you please. My captain is sensitive to protocols."

"Yes, Captain Razo. A sensitive man."

Her tone conveyed that she had Anatolly's measure. Zoya muffled a sigh. The chessboard was already full of pieces: Anatolly, the girl Kellian, the man named Lucian Orr, the sub-routines of Ice that drove the world. Zoya decided she wouldn't give away what she knew. She would wait to see what it might be worth.

But before politics came something more personal.

"Mother Superior, my first priority is to secure my compan-ion's remains, outside your walls. My people owe him a proper burial."

In a gesture toward the barrens, the nun displayed a large ruby ring. "The horde carries association of disease. Those who die of such a raid are left to the cleansing winds, or cremated."

"But I've been told the rats are not diseased," Zoya said. So she'd learned at the preserve. They wouldn't eat infected meat.

Mother Superior's voice was rich, like the fine wool of her robe. "It is traditional."

Zoya gazed at this chief nun. She thought the woman sel-dom drank, sang, or told stories. It led to a multitude of ail-ments, such as joylessness and cold heartedness. She was the sort of person Zoya had the least use for. There were only so many days allotted to one's life. They should be chock-full of life in all its rumpled glory, not pounded flat and stiff.

The nun said, "I commend your honorable intentions to-ward your driver. But surely we have more important things to discuss?"

Oh, very flat and stiff, if she thought burying a friend was unimportant.

"Both our people have traditions," Zoya said. "Let's begin by understanding that. I would agree to placing his remains out-side, in a proper receptacle, near the Zoft's walls. Not out on the plain. I'll gather them myself, if you'll provide a shroud." She smiled. "A reasonable compromise, yes?"

Solange shook her head. "You may not touch pack-kill, and then come inside."

Zoya looked at her steadily. "I see."

A long pause as the nun's face grew sober. "Not a good be-ginning, then."

"Perhaps not."

"Your reputation goes before you, Ship Mother."

"Regrettably, I have a longer reputation than most."

"I've heard," Solange said. "You sleep. Then awake. And so on."

And so on. A merciless summary. But it would do.

Solange lifted her hand and pointed to the walls of the room in a 360-degree arc. Around them, a silent

scene materialized. People were massing in a joyous crowd. Trucks delivering food, ragged people passing along the sacks of food, hand to hand. The scene shifted to medics delivering shots to children, nurses caring for diseased patients so ill that blood oozed from their pores. The holography made them real, surrounding the viewer.

The scenes were from different parts of the world, different times—but all before the time of Ice.

"Real recordings?" Zoya asked.

"Yes. Records of the First World. Very rare. This Hall of Hon-ors has hundreds of hours of such recordings. This Keep is an an-cient site, among the first to find protection under Ice. We are at the location of an ancient enterprise of the highest technology."

The displays segued to leaders signing documents, shaking hands amid hundreds of international flags rippling in the wind, sharing the same plaza.

Zoya asked, "What has this to do with the Sisters of Clarity?"

The nun's eyes took on a new luster. "It is our grail. To achieve—consistently achieve—honors like these." Her hand gestured to the unfolding scenes. "For this reason, we look to Ice for higher reasoning."

"Reasoning? You believe Ice can reason?"

Solange's voice came indulgently. "Look around you, Ship Mother. The world is Ice. Can you believe it is simply a com-plex system? Nothing more?" She continued, "At the very least, it is capable of higher logic. To analyze a path to moral re-sources that can save us from destructive impulses."

"Better living through information processing?"

"Easy to sneer. But what is your alternative? Religion? Good intentions?"

"Good intentions aren't a bad start."

Solange paused, shaking her head. "You have such faith in human capability. But think about it, Ship Mother. What can we really know? What can we possibly know? There is a gap between what we think and what is actually the case. The less intelligent you are, the greater the gap. But there is always a gap. And what rushes in to fill it?"

"Philosophy, it would seem."

The nun waved a dismissive hand. "The least objectionable. Worse are the infectious diseases of the mind: religion, mysti-cism, good intentions. All are players in the game of reality generation."

"As is philosophy."

"Yes, that is so. Until Ice lifts us above ourselves."

"Until..." Zoya murmured. "You await a day that may never come."

Mother Superior fingered her ruby ring. "That depends."

"On?"

"We have our hopes. Our inquiries are far-reaching." She looked up. "You, for instance. How have you fared against the encryption?"

"Nothing, yet."

"Ah."

Zoya asked, though the answer was clear enough. "And you?"

"Nothing," the nun said. "Yet."

Zoya gazed at the display of honors. She murmured, "The pre-serves think you'll rid them of Ice—set them free from poverty."

"They are simple people with shortsighted goals."

"But you've banished poverty from your Keep, I observe."

The nun shrugged. "Volunteer labor."

Zoya didn't pursue that, much as she would have enjoyed doing so. She turned to look at the holo display. The figures were close enough to touch. But of course, they were all tricks of light. Truly, the nuns were a soiled ally. Zoya had thought so from the day she held the crying boy, shielding him from the pack of nuns.

"I've seen enough, Mother Superior."

Solange waved her hand, and the scenes dissolved. The nun was considerably less attractive when she scowled. "This hall has been my life's work, Ship Mother. To collect and display humanity's potential. But the sisters don't come here. They pre-fer the Hall of Horrors. Some people are incapable of finding inspiration in humanity's transcendent moments. The rabble does prefer horror." She glanced at Zoya. "I beg your pardon. You are not part of our tradition, of course."

"Sometimes the harsh stories are best."

Solange turned and walked toward the wall opposite the en-trance door. "This way, Ship Mother. If it's horrors you want."

They passed through to a long, bare room, with benches in the middle, as in a museum. At the nun's wave, the few sisters who were visiting the hall fled. Zoya walked by Mother Superior's side, as a wall screen came to life. It showed the flow-ering cloud of a nuclear detonation over a Japanese city. Hi-roshima. Then the aftermath: the ghastly wounded, the shadows on the ruined walls, carbon remnants of human beings.

"I don't need reminding," Zoya remarked, "of inhumanity."

"We all need reminding."

They walked on. China's Great Leap Forward—to mass star-vation, while leaders feasted in their palaces. This was an older technology, of projected films. Solange remarked that the hall was ancient. Left unsaid was the slim chance that her own ac-complishment, the Hall of Honors, would last as long.

Mother Superior led her down the hall. To a hill of skulls. The Khmer Rouge. To the ghastly ruins of New York's twin towers. To the pits of Copenhagen, filled with Rampage vic-tims, some still living... they walked on.

"We have the standard lecture," Solange said, "on the mon-sters inside us: sadism, tribalism, feuding, genocide, racial cleansing. Ideology, often religious. But some need the pictures to make it real."

They passed the conflagration of New Orleans, when the plague city was torched, people and all. Flames fed on the grease of flesh.

She knew why the sisters came here, and not the place of honors. Because here, the scenes were awful, mesmerizing, and unstaged. So hard to look away. Oddly, suffering commanded attention, and celebration did not.

Solange went on: "The slave trade of even the most pious of empires, even the old United States... the genocide of the American Indian by Spaniards, by Americans... the 60 million dead in World War II... the Nazi concentration camps... shall I go on?"

"Oh please do."

"The Soviet gulags killed three million... the mass starva-tion in India... the fall of Africa to AIDS while the world watched indifferently..."

Solange watched her. She was trying to soften Zoya, to make a point. Yes, it was a fine point, an inescapable one: humanity's depravity. It was central to the orders creed and ambitions, but remote from life. Incidental to the larger perils that somehow had fallen on Zoya to contain...

Another display. It was a barracks. A simple wood-frame building. Zoya had a bad feeling about this one. The scene was not as remote as she might wish.

It was altogether more affecting. She narrowed her eyes... It was a military camp, a cleansing camp like ones she'd seen, walked in, grieved in. The barracks... women in ragged slips. Children, naked children. Eyes peering from the shadows of darkened cells. She looked at the display, her mouth dry, stom-ach feeling like it had dropped several stories.

She turned away. It was all to make a point. Mother Superior's point. The point that the good sisters wished to make. For clarity.

When Zoya turned her back on the display, she knew she'd lost it. Her control. Her diplomacy.

"Those are my people," Zoya whispered.

Solange nodded. "I know." In the flickering lights of the film, the nun's face took on a whitened pallor, such as could come with too much thinking.

"You don't use my own history against me."

"Just to open your eyes."

Zoya bit off the words, one at a time. "My eyes *are* open." She had been there, had her eyelids peeled back, had carried the scene with her into all her sleeps. For these nuns, it was just one thing in a long list of things. One more horror for the hall.

The nun held her gaze for a moment, then looked away. "Yes, of course. We only mean to preserve the records, so it will never happen again."

But it is happening again. The children, the execution. The woman, so earnest and certain, was blind to the appalling irony.

Under better control, Zoya said, "So Ice will save us from all this?" She gestured down the Hall of Horrors.

Solange shot back, "We devoutly hope so. How well have we done, otherwise?"

"How well are you doing now?"

The nun swept past this, full of her convictions. "The Sisters of Clarity are creating the next stage of the world. From infor-mation to meaning. Ice must take us to that stage."

"A new ideology."

The nun's eyes were lit with a strange fire. "All right, if you will. It won't be perfect." She gestured at the barracks. "But it will be better than *this*."

"No, Mother Superior. It won't be." No pretense, now, of diplomacy. There wasn't time for pretenses.

Solange lifted her hand, as though giving permission to speak, to rebut.

Zoya didn't need permission. "It won't be anything more than what it is right now. The world is both honor and horror. My people never thought it was all one thing. It's dangerous to think so. Many of the horrors in this hall came from people who thought it could all be good, who wanted to erase their fa-vorite evil. Oddly, you don't see that."

The nun shook her head. "Now *your* ideology is showing, Ship Mother. You speak of evil. Such error. You are a Catholic."

"Not necessarily. I'm Ship Mother."

The nun cocked her head.

"You get used to a load of trouble, being Ship Mother. It's all in the mix of things. People are a mix. The world is a mix. I prefer it that way. And so do the People of the Road, I think you'll find."

Although Zoya did not detect a signal from the nun, the dis-play ceased, and the wall screen went bare. They faced each other across the gulf their conversation had created.

Mother Superior said, "Nothing will change your mind. I can see that." She shook her head. "You are no friend to Ice. You would wish it gone."

"Yes. But slowly. Nothing sudden."

"Sudden," Solange repeated, eyes flicking up to meet Zoya's. "No, not sudden, of course not."

An awkward silence prevailed while Zoya considered what to tell, what not to.

"There is a man by the name of Lucian Orr," Zoya said. "You've heard of him?"

"No. Lucian... Orr—you say?"

"There is a story, Mother Superior, about a man named Lucian Orr. In this story—an ancient story—he designed Ice to discover the secret of longevity, to prolong his life beyond the normal course."

A small frown appeared between the nun's eyes. "Longev-ity... but that wasn't Ice's purpose."

"No, not in the beginning. He subverted it. And now he's awakened from a sleep in Ice, and finds that Ice has failed."

A very long pause ensued. Finally, Mother Superior asked, "Is it known what this individual looks like?"

"It's known. I've seen him."

"And?"

"Tall, white hair, rather long. Bad skin."

Solange nodded. "Well, we shall certainly watch for such a person."

Whatever the nun knew, she wasn't saying. But Zoya would.

"Lucian has threatened to invoke an ancient program. A sudden and catastrophic destruction of the Ice mantle. I believe he may be capable of this."

Mother Superior blinked, looking slow-witted for the first time. To Zoya, there seemed many ways to be smart, and this nun lacked a few of the more useful ones.

"Why? Why would he do this?"

"Despair, perhaps."

"And what has this—Lucian—to do with you?"

"He hunts me. You might be in danger too."

"I believe he is your enemy, Ship Mother. Not mine."

That statement, the nun's most open expression of hostility, seemed to signal the end of their discussion. Truly, there was no common ground.

Solange seemed to share that thought. "Ship Mother, I had rather hoped for a better rapport. We might have worked to-gether, you and I."

"Two cooks will spoil the broth," Zoya said in the old tongue, for the axiom did not translate well.

Mother Superior looked at her with her first true smile, small though it was. "As you say," she responded in the ancient English.

The Hall of Horrors was quiescent now. The tour was over.

As Solange led her out of the hall, Zoya said, "One small matter, Mother Superior. This Kellian Bourassa. She is an ac-quaintance of mine."

"How unfortunate." It was not a sympathetic tone.

"Perhaps you might reconsider her sentence. I would take her with me, if you wish." Zoya was in fact determined to take Kellian with her. But she must proceed carefully. She didn't trust what the nuns might do if they thought Kellian possessed secrets.

Solange shook her head. "You would regret such a recruit. Trouble does follow the girl."

"My sort of girl," Zoya murmured. "But perhaps as a gesture of goodwill?"

"My *gesture* was opening our door when you knocked. There was rather a large group of rats just behind you."

And a large black one beside me now, Zoya thought, but held off saying.

# **CHAPTER EIGHTEEN**

# \_j\_

Solange walked through the hall of Ice looking for Swan. She called his name. The cry fell flat against the brittle surfaces.

No reason to think he would go there, but Solange felt her-self drawn back to the place where they had first met.

She went alone this time, without bodyguards. Things had gone beyond the usual measures. They were in extremities now, both she and Swan. Perhaps this would provide a new bond if she could just find the man.

In her searching, she came upon evidence of a place in which Swan had lived for a time. Scattered around were empty cans, ragged bedding. She picked up items of clothing, looking for insight into this Swan, this Lucian Orr, searching for some remnant that might explain why he would want to live for-ever... and why that would be beyond Ice to deliver.

She dropped the torn shirt he had once worn. There was nothing but garbage.

Solange looked around her, at the walls of Ice. To her sur-prise, she found herself addressing the walls, speaking to Ice. "Is she lying?" Her words sounded hollow. She might as well be speaking to stone. But she continued, "Is Zoya trying to sow confusion? Did Swan lie to me?" She turned in another direction. The same bland, blind crystal stared back. "Do you care what's said on your behalf? Will you sit dumb and mute until the end of time?"

Words boiled up out of her, against this damn machine. "Nothing to say for yourself? No justifications for all the grief you cost us?" For all the grief it cost *her*. A life wasted. The damn machine.

She stalked to the plane of Ice that formed the nearest wall. Placing her hand on Ice, she whispered, "I am Solange Arnaud. The one who could have turned your miserable data into meaning." Her hand was just a pale chunk of skin on a cold wall. She pressed harder.

"It's proper to say, Yes, Reverend Mother."

Silence.

She took her hand away. "God damn you, Ice."

### \_2\_

In his briefing room Anatolly stared out the porthole at the stars. They looked like pieces of shattered crystal, remnants of something that once had been whole.

Like him. Once he'd had a mission, and a clear one. Come home to earth. Now everyone and their cousin had their own mission—Janos, Donicetti, Tereza...

"Captain, coming up on the storm, sir," the ensign said, over the comm.

"Acknowledged." As Anatolly punched up visual on his ter-minal, the screen filled with the white fields of earth. Every time he looked at it, he felt a clutch in his chest for the old earth. The real one. Every man and woman on *Star Road* car-ried that blue visage in their hearts. This wasn't how home was supposed to look.

The crystal-free lands and oceans of earth formed nearly a full ring around the globe, except for the former Central America, where the mantle formed an isthmus. The last remnant of land, that ocher swath across northern Africa was visibly smaller than the previous week, falling to the relentless creep of Ice.

Just coming into view was what they were calling the Pacific Ocean Shelf, where the light storm brewed.

Within the hour, Lieutenant Mirran would set out from base camp to pick up the children. The nuns would meet him near the Ancou preserve, their last stop in combing the settlements for needy youngsters. According to Mother Solange, there would be forty-eight children. The interested crew drew lots, but since this was only the first batch, even the losers were content. Anatolly wished he could share their mood. Mother Superior had negotiated with Janos to assure that several nuns could board Ship with the children to settle them in. Anatolly agreed that three nuns could board... but the thought of them in their black habits and godless attitudes rankled. He sat back in his chair, resting his chin on steepled hands, staring at the screen.

Lieutenant Mirran must hurry. The storm was moving east, in an odd mirroring of the old earth's atmospheric storms. If it didn't subside, it would be sweeping over the rendezvous point within hours. The swelling magnetic fields probably wouldn't endanger those on the ground, but flying the shuttle during such an electromagnetic burst could swamp the onboard electronics.

This optic snarl had begun welling in the mid-Pacific Shelf the previous day. Now, a rich explosion of lights lurched across the expanse in stabs of crimson, violet, and blue. Beams of light crisscrossed, surged, and retired. Green and orange lanced across geographic Ice, fracturing its alabaster calm. And those lights were only the ones close enough to the surface—and sustained enough—to be seen from orbit. The science team called it an optical storm. Perhaps, on the new earth, such silent storms often disturbed the barrens.

But the storm worried Anatolly. It was headed relentlessly east, and Zoya was in its path. Light isn't dangerous, he re-minded himself. As he gazed at the storm he found himself thinking, but information is. The whole global shell was information. And some of it was deadly, if the story of the amulet was true.

Zoya's driver had the amulet as a personal keepsake. Think of that, the most precious record of the early calamity, hung around an illiterate's neck for decoration. All this, according to Lieutenant Mirran. But it had been four days since he'd heard from Zoya herself.

He watched as the terminator line advanced over the storm, plunging it into planetary night.

The optical storm brightened, snapping off gigantic spurts of light, sometimes laterally, sometimes vertically from deeper Ice. It lumbered eastward, leaving behind smaller flutters in its wake.

Blooming over the storm was a massive aurora—like an out-rider, at this distance, merely a wash of greenish gold.

Anatolly jumped when someone put a hand on his shoul-der. It was Janos. The man's face looked mildewed in the mossy light from the screen.

"Excuse me, Captain. You didn't answer my knock."

He might not have anyway if he'd known it was Janos. Anatolly stood to face him.

"Lieutenant Mirran has left base camp," Janos reported. "It won't take him more than a couple of hours to reach the ren-dezvous." He turned to look at the view on-screen, where the storm had taken on the look of a pea green stain, seeping off eastward.

"Damn strange," Janos said. "We're monitoring the electro-magnetic effects." He glanced back at Anatolly. "By the way, Zoya is at the Keep. Mother Superior radioed us."

"Thank God." Anatolly let himself enjoy a welcome surge of relief.

"Well, thank Solange, anyway. Someone has to keep track of the woman."

"I'm sure you worried about her."

"I've always worried about her. She was never the one for the job. And now she won't be needed anymore."

"Not needed?"

"We're in touch with the Sisters of Clarity ourselves. We don't need Zoya. And she could ruin our relationship with the nuns."

"But Ship Mother..."

"Is disruptive. Solange reports that she's hard to work with. Zoya lost her driver on the barrens and is fairly emotional about it, I'm afraid."

"Lost her driver?"

Janos shrugged. "Too emotional all the way around. There's the mess she made with the nuns and the children last week. The lapse in her radio links. She's in over her head."

On-screen, Anatolly watched a streak of violet light head off in three directions, like his own emotions. "She worked hard to get to the Keep, Janos."

"She did manage to get there, eventually."

Anatolly swung around to fix the man with a glare. "It was a damn sight more than that, Janos. Don't try to deny it. And she gathered major intelligence along the way."

Janos changed his tone. "No doubt she's made a contribu-tion. But her role's finished now."

"I hadn't seen it that way."

By Janos Bertak's expression he had. "Recall her, Captain. It's time."

Anatolly swallowed. They were in contact with the Keep themselves, regularly. In some respects Zoya was redundant.

But he knew what she would say: that Janos mustn't be the one to deal with the nuns. To deal with anybody. The thought of having that conversation with Ship Mother made him feel as if the bilious green light show below was a real-time view of his stomach.

Janos said, "Mirran can easily pick her up, bring her in with the children."

Anatolly slumped back into his chair. He growled, "I'll think about it."

"Don't wait too long," Janos murmured. "There's a storm coming."

Sister Patricia Margaret led Zoya deeper into the west wing of the Keep.

Unexpectedly, Solange had summoned her. There was noth-ing more to say, was there?

Nuns passed them, nodding to Sister Patricia Margaret and sliding glances at Zoya.

"These halls aren't used to strangers," Zoya observed.

The nun kept her gaze straight ahead. "You are the first guest in a hundred years."

"If I'd known, I would have dressed better." The sister glanced at her underneath imposing eyebrows, but said nothing.

"What is your post here, Sister Patricia Margaret? I must be taking you from more pressing duties."

The nun's mouth flattened. "Retired."

"Ah. A well-deserved rest."

"Yes. But Reverend Mother felt that I might be a proper guide for you. You must tell me if there's anything you lack."

They continued down the corridor, with its display of crafts-manship and wealth. Doors of real wood, each one carved.

Floors of polished wood, glass chandeliers suspended from the ceiling by long golden chains. Such a walk might intimidate. If one hadn't seen such things before, the grandeur of institutions that took themselves too seriously.

"Sister, that young woman yesterday... the one who ap-proached me. She implied that you know my friend Kellian."

"Your friend?"

"We met several times at Ancou preserve, before you took her. I liked the girl."

The nun gripped her cane and made no comment.

"Kellian was your apprentice?"

"Yes. A victim of error." The words were hard, but the voice, softer.

"You have affection for her." It was a guess. Zoya needed to move across this chessboard one way or another.

Zoya counted off five clicks of the nun's cane on the floor before the answer came. "Yes."

Zoya murmured, "The young have a way of making mis-takes. And pointing out ours."

Patricia Margaret didn't reply, but turned them toward an arched set of double doors. In front of them, Zoya said, "I've taken a fancy to your Kellian. I would save her from harm, if I could. Is there a way?"

"No."

"Sister, when I first met you, you told me that the order's goal was to free the world from pain."

The old nun turned a frosty eye on her.

"Doesn't killing a young woman like Kellian conflict with that goal?"

'Sister Patricia Margaret was unperturbed. "How remarkable that you think you have so much figured out. Being a stranger here."

"It's part of my job, Sister. To figure things out in a hurry."

At that moment, the door opened, and a brown-robed fig-ure emerged. Hastily, the hood came up over the head. But Zoya caught a glimpse of a strikingly handsome young man with dark hair and eyes. He strode off without pausing. A lover? But that was hard to imagine.

Inside Mother Superior's suite, Zoya saw that what she had taken for splendor in the rest of the fortress was merely pro-logue. Although the room was not large, it was richly appointed. Amid the woods and carved stone was a gracious mixture of tex-tiles: wall tapestries, embroidered sofas, and Persian carpets. The colors were red, maroon, and black, like fine wine and the best caviar. An oval of sunlight burst through the slit of a win-dow, illuminating a small, twisted tree in a glazed pot.

Solange turned from the window where she stood. "Ship Mother," she said in welcome.

"Mother Superior." Now the easy part was over with. The rest was a minefield.

In the bright light from the window, Zoya thought the nun looked tired.

Solange beckoned to her, and Zoya joined her at the narrow window. A veil of tea green light hovered over the barrens in the west.

"It's been building for days now," Solange said. "I think it may presage a breakthrough."

"Of what sort?"

Mother Superior smiled. "Of discourse." She looked back toward the light storm. "Ice is changing. I feel it."

The white geography in front of them had taken on a tinc-ture of green, like a faded memory of lush botany. The aurora climbed higher as the optics surged toward them.

"Somehow," Zoya observed, "it doesn't look happy."

"I don't fear Ice, Ship Mother. It's the difference between us."

Maybe you should, Zoya thought. But she wasn't here to trade barbs. "It would be your finest addition to the Hall of Honors," Zoya said. "If you succeeded—in discourse."

"If I did that," Solange said, "I would have no need of the Hall of Honors."

"Honors come in many sizes," Zoya said. "Releasing Kellian Bourassa to my custody could open a dialogue between the sis-ters and the People of the Road. Though our goals differ, it will be a long time before we could diminish the domain of Ice in any significant way. The Sisters of Clarity would have many years to find Ice's wisdom."

Solange shook her head. "Kellian is privy to all our secrets, our traditions, our defenses. We would be helpless before your strong ship. Not that you intend us ill. But we are cautious, you understand."

"She is only a girl. It smacks of—inhumanity."

By her expression, Solange took that for an insult. She turned away, moving to stand by the miniature tree. She fin-gered its needles. "Have you seen one of these before, Ship Mother?" Solange caressed a branch.

"I believe they're called bonsai trees."

"Yes."

"It's beautiful."

"It's the last of several that my predecessors have cultivated. This one is six hundred years old."

Zoya smiled and approached. "May I?" She reached out to touch it.

Solange nodded permission, and Zoya felt the prickly nee-dles, their green magnificence. She savored the moment in quiet.

"A long time?" Solange asked.

Zoya nodded. "Yes. We have some growing things on Ship board. Nothing so fine as this."

"It's company, believe it or not. Having a growing thing nearby." like a pet, came Zoya's uncharitable thought. Other unchar-itable words were queued up, waiting for the exit gate. But Zoya smiled instead.

The nun murmured, "I wanted you to see that, despite my decision with regard to Kellian, I'm not incapable of sentiment. Because you may find fault with my hospitality."

It gets worse?

Mother Superior pointed to a low table between the divans. There, resting on a footstool, was a machine. If she had to guess, Zoya would have said, *radio*.

It was hissing like a cat.

"Needs tuning," Solange said, gliding over to it. She pressed a key, finding the link-up.

"... check, over. Sisters of Clarity, this is Star Road. Radio check, over."

Solange seated herself on one of the sofas and reached for the microphone. "Yes, radio check is satisfactory, over." The nun smiled, handing Zoya the mike. "It's for you, my dear."

A pause, while Zoya had time to think. Avoiding talking to Ship was no longer possible. Well, she wasn't going to deal with Janos Bertak. She wouldn't believe anything the man claimed. If nothing else, she'd demand to speak to the priest...

"This is Zoya Kundara. Who's speaking, please?" Solange sat opposite her, looking like she'd just said *checkmate*.

"Zoya, this is Anatolly."

"Anatolly? How are you? I was told you were sick."

The radio hissed. "Well, *I'm back*," he said ambiguously enough.

"What's been going on? I was worried about you," Zoya said.

"You could say the same about us. We've been worried."

"We?"

The radio coughed. "Janos and I."

There was always Janos. Everywhere she looked on the Ship, there was Janos. "I've had trouble with my radio," Zoya said. It kept lying to me, she almost said.

"Well, I'm just relieved you're all right."

"And you, Anatolly. Are you all right?"

Solange sat across from her, eyes downcast. Somehow, on Solange, it didn't look demure.

"Oh yes, fine. But Zoya ..." The pause was filled with static. It was such a long pause.

"Out with it, Anatolly."

"Well, we've decided... that is, now that the children are on their way..."

"Children?"

"We're taking on a jew orphans. Lieutenant Mirran is picking them up. The Sisters of Clarity have been indispensable in this."

"Orphans. I see." She glanced at Mother Superior, who had the grace to look uncomfortable.

"Yes, the crew is thrilled, Zoya. It feels like a new ship."

"I'll bet it does."

A pause. Then it came. "So well want you to come home, Zoya."

Could this be Anatolly speaking? Former lover, former man of honor? How much the world had changed. How little she knew of it anymore, to be so wrong, so terribly wrong about a man.

"As soon as possible, Ship Mother. Tomorrow, in fact."

She kept her anger in check, not wanting to allow a nongypsy to watch a family quarrel. "Mother Superior and I haven't finished our conversations, Anatolly. So important, for us to reach an accord, you know."

"We've reached an accord, Zoya. Now I want you to come back. That's an order, I'm afraid."

Zoya imagined Janos standing by Anatolly. Perhaps even a gun at his temple.

"Anatolly, I thought we were friends."

"Now, Zoya..."

"Remember the time you sang me to sleep, when it was time for me to go back to the creche? I asked you to sing for me. The 'Internationale.' Such a lovely song."

"No, Zoya. Don't you remember? It was a lullaby."

And so it was. The image of Janos with the gun evaporated. It was Anatolly, Anatolly himself who was betraying her. It sur-prised her, how much it hurt. Perhaps, sleeping her life away, she had forfeited her place among the Rom. How else could they turn their backs on her? Was she a stranger indeed?

Zoya looked across to Solange Arnaud. "Apparently I don't have to impose on your hospitality much longer, Mother Superior. May I have a moment of privacy with my captain?"

The nun stood up, smoothing her robes. "Zoya, I had so hoped for a different outcome."

"Well, it's early, Solange." Zoya didn't bother with sounding sweet.

Mother Superior bowed slightly. Then she left the room, her robes rustling on the thick wool carpet.

Zoya watched as the door closed behind her. Then she leaned into the microphone. "Tolly, don't be an ass. The chil-dren are stolen."

"What did you say? Stolen?"

"The nuns buy them from the poor at the preserves. Ask Worley, he freely admits it. You'll be dealing in child slaves. Is that what the crew wants?" It was clear how Solange was sub-verting them. She'd found the weakness in the crew—or Janos had—and now Solange would extract her payment. Zoya wasn't sure what it was, only that it mustn't be paid.

"It's nothing like that, Zoya, believe me."

"No, I don't believe you. I've seen the operation. You'll be ripping the children from desperate parents."

"Be that as it may, Zoya..."

"Be that as it may? Tolly, for the love of God, pay attention for once. It stinks. Can't you smell it?" The sodden, green light from the window darkened and flickered bright again. She glimpsed a tongue of lightning far away.

"Zoya, Lieutenant Mirran will be coming for you tomorrow. He has permission to land outside the Keep. Be there waiting for him."

Zoya counted the seconds until the thunder came.

"Zoya.7

The growl of overcharged skies kicked in.

Zoya reached out a hand for the toggle. She touched it down slightly, as she skewed out of the frequency. "Can't hear you," she said. "Voice breaking up. Please confirm orders." She kept her finger on the toggle, until all she could hear was the background hiss of the universe.

She sat frozen on the divan, hand still on the toggle. She had just told her captain that his orders stank. She couldn't remem-ber if she'd outright refused to obey him. But if she hadn't, she meant to. Mother of God, she was going to turn her back on Ship captain. All this time she'd been obedient.

Her hand went up to the diamonds in her ear. Sometimes you don't give in. You refuse. Sometimes, even to your captain.

Anatolly was either incapable of leadership or subverted by Janos. It amounted to the same thing. Now she would start making decisions. But who was she, of all people, to lead? She was only counselor,

storyteller, Ship Mother.

And she was the one who was here. Now.

Wolf's words came to her: *Isn't that what you came home for*?

Yes, exactly. Zoya stood up, chilled, exhausted. Exhilarated. She had come through hell to get there. She planned on finish-ing something before she left.

After a moment, she walked across the plush carpet and let herself out.

Sister Patricia Margaret was waiting.

"I may have to go away soon," Zoya said, as the sister hur-ried to catch up with her long strides. "I'd like to say good-bye to my friend Kellian before I go. Would you grant me that small favor?"

The sister gave her a sour glance. "Very well. A brief visit."

# **CHAPTER NINETEEN**



Kellian no longer wore the robe of the order. She had her old clothes back. They still fit her, though she was no longer the young Zero who thought she could be a good nun. She sat on the floor, tracing a pattern in the stone with the sweat of her hand.

She pictured herself waiting on the barrens, standing on a disk of white beneath a bowl of pitiless sky. Cold. Watching for the pack. Hearing them come. She had no regrets—it was as Sister Patricia Margaret had told her, she had chosen to fall. She had seen sister only once since her confinement. Her mentor had aged a dozen years. Stricken with worry over Sister Verna, defeated by nunnery politics, she had come to say good-bye.

Incised in Kellian's memory was the scene of the snow witch's flailed arms, the face of wild pain. Sister Patricia Margaret said the snow witches had interface pathways in their arms so that they could communicate with Ice through their fingertips. They couldn't be anesthetized because then the mental commands couldn't be traced in the nerve pathways. There was always a good explanation for such things.

Maybe the moral criteria should be, if you have to explain it, it's wrong. Well, she was no ethicist. But neither, by God, were the nuns.

Upholding their supposed moral principles, the sisters justi-fied her expulsion on the grounds that she had subverted their enterprise in the north wing; conducted spurious research; contaminated Ice with corrupt data. No mention of the suicide of the snow witch in the chapel. The bloody and flailed body vanished; the evidence against her was an adolescent's diary.

Kellian's finger traced a zero on the stone floor. Then a one. If the stones could speak, binary might be their language. She thought that, given time, the time she didn't now have, that Ice could have been her life's work. The new Ice, the Ice that had begun to think. Perhaps consciousness was an inevitable property of complexity. Or perhaps, to evolve higher, it must be subjected to stress. Comfortable bacteria would never crawl from a warm pond. Ice was stressed, and now crawled toward some new state...

A tap on the window. She had visitors. Kellian jumped up.

"Kellian, my child." Zoya Kundara spoke to her. Standing alongside, Sister Patricia Margaret, head bowed.

Kellian drew close to the viewing window. "Zoya..." Here was the woman of the great ship. She stared at Zoya, speechless.

The star woman's face was sober, but her eyes were afire. "I've heard your story, Kellian. You are braver than the rest. Your friend—Nita, is it?—your friend has been speaking out for you. No one listens." She paused. "But don't lose hope."

"No," Kellian whispered. She glanced at Sister Patricia Margaret. From her expression, there was no reprieve.

Zoya came closer to the window. "Walk due north, Kellian. Don't walk westward onto the barrens. I'll search for you when I leave here tomorrow. But walk north, along the Keep walls, and along the base of the Ice massif."

Sister Patricia Margaret was choosing to ignore Zoya's words. Maybe there was some feeling left in the old nun.

If Kellian could survive one night, there was hope... But of course, the nuns threw food over the battlements to call the horde. So there was little chance of salvation walking north.

Still, she smiled, grateful for the kindness. "There's something you could do for me in return."

When Zoya nodded, Kellian said, "My mother, at the pre-serve. Tell her that I didn't lie down with rats. She'll know what I mean."

Zoya smiled. "Yes, she will."

The star woman fixed her with a steady, dark gaze. "Kellian. Now you must help *me*." She nodded. "You have something to tell me. Now is the time."

"I talk to Ice," Kellian said simply.

"I know." Zoya moved quickly past that remarkable state-ment. "What I want to know is, how."

Sister Patricia Margaret tapped on her cane, impatient, dis-approving.

"We just use ordinary language. A tronic, on-screen conver-sation." Kellian could see what the sister thought of *that* no-tion. Her former pupil talking like a zealot. But Zoya was listening. "You don't need code. It learned natural language. Maybe it learned it just to talk to me, or maybe it taught itself long ago. And I think its size, its global extent, has brought it to a level of consciousness."

"Consciousness?"

It was an outrageous claim. Kellian knew how she must sound: eager and foolish. But she went on: "At first, Ice was a storehouse of facts, with limited logic capability. It was ac-cessed by its programmers, amplifying their intelligence. But then Ice came to a stage where it integrated the facts it stored. It could relate one thing to another." She could see Zoya frown-ing, concentrating.

"Go on, Kellian. We don't have much time."

Kellian plunged on, grateful to spill her story. "In the north wing, at my node, Ice asked me a question." Kellian faced the star woman eye to eye. "It asked me who I was." Kellian came closer to the window,

touching its cool surface, trying to get through to Zoya. "I had downloaded my obo program, and it must have found that—interesting. Then I sent it my diaries. That resulted in lots of questions, especially about snow witches. Ice is troubled by snow witches."

Zoya said, "Ice has bigger trouble than that."

Kellian could only stare. "It does?" Now even Sister Patricia Margaret was paying close attention.

"Kellian," Zoya said, "I can't explain everything now, but we face something terrible. Time is running out. I must talk to Ice. Is there a way?"

"Yes. But what threat?"

Zoya sighed. "Ice's programs are caught in a logic loop. It has to do with preserving the life of a man named Lucian Orr. Do you know this name?"

When Kellian shook her head, Zoya continued, "He's re-sponsible for a program working on antisenescence. I believe that snow witches are experiments in longevity, failed experiments. But overcoming this failure creates an endless logic loop. Lucian Orr has had an extreme reaction to this failure. He might be able to do a lot of damage."

Kellian saw that sister was getting ready to interrupt. "Zoya," she said, "go to the north wing. Go there and key in my name. It can't tell who it's talking to." Kellian glanced at Sister Patricia Margaret. "Help us, Sister."

The old nun snorted. "I've *been* helping you, young dolt." Kellian and Zoya stared at her. "But you won't get into the north wing. And you don't have to. You have an interface, Zoya." Sister raised an eyebrow. "In your satchel."

Zoya had turned to her, and was looking at sister warily. "One that doesn't work."

Sister's mouth pressed into an ironic smile. "According to my pupil here, Ice isn't as deaf as we once thought."

Kellian found that Sister Patricia Margaret looked years younger when she didn't hang her head and look at the floor.

Patricia Margaret nodded at Kellian. "My girl, you were right about Verna. She's not on a mission. I've seen where she is." Sister clutched her cane. "It was rather a long walk, but Brother Daniel showed me." Her face collected its expressions, in what looked like an act of will. "I saw the snow witch in the chapel, too. I had closed my ears to those screams for too long." She looked at Zoya. "I'm afraid our order is guilty of the worst sci-ence—lacking a moral compass. Lacking compassion."

Sister turned back to Kellian. "I've chosen to believe your claims. I can't put you to the test, but Nita convinced me. We may fall down together. But I'm in."

The sister raised her cane, silencing Kellian's response. "Now comes the hard part, Kellian. You must accept your sen-tence. I'm not strong enough yet to intervene. Many nuns—and brothers—are dissatisfied, but to grow we need secrecy. That means you must walk out of those doors tomorrow."

In the reflection of the pane of glass, Kellian saw herself smile. "Yes, Sister."

"There's an Ice storm coming," Sister continued. "Ice could be dangerous." She turned to Zoya. "If you're going to find Kellian, best to do it quickly tomorrow."

"What happens in an Ice storm?" Zoya asked.

Sister Patricia Margaret paused. "Electromagnetic surges. But we've never seen one this size. Nothing even close." She looked down at her cane, twirling it once. "I don't know about this logic loop of yours, but I think Ice is rushing to judgment."

"Then let's get started," Zoya said.

Sister Patricia Margaret said, "I believe the ramparts of the Zoft might be the fastest connection."

Kellian said, "Hurry, before the storm comes." She said it not for herself, but because if Ice was rushing to judgment, she was afraid of what it might conclude. It didn't have many moral re-sources, as the nuns liked to say. It had been using *her* as a re-source. On its own, Ice was dreadfully inept.

Sister Patricia Margaret took Zoya's arm to guide her from the room. Then the nun turned back to Kellian. "Don't give us away, my girl. Try to look abject. As challenging as that may be."

Kellian saw by her reflection that her expression was far from abject. It was more like relief, or triumph.

2

Anatolly wore a parka and woolen hat, for this particular Ship's corridor was empty and cold. No one had walked down this deck for over a hundred years, making it one of the few places on *Star Road* where he could be truly alone.

There, no one would come up to him, gaggling, advising, questioning, complaining. Until this moment he hadn't real-ized how much he'd needed ordinary silence.

As he walked, his footfalls echoed off the corridor walls. He passed stowage lockers, cabin doors, an old payload bay, its latches closed. Everything snugged up. Shipshape. Eventually he stopped looking for inspection items, as was his unbroken habit, but just strolled, as though he weren't captain, not in charge. Chipped paint and a few pieces of cast-off equipment bespoke abandonment, but it felt fine. A fine, cold quiet. His mind, rather than thinking better, simply stopped thinking. It was a relief.

Walking by a viewing porthole, he caught a glimpse of the planet. By happenstance, the gathering optical storm winked at him, catching him despite his resolve to stop staring at it. He paused, looking out. The vast Pacific was the worst view: uninterrupted by mountain spines, the relentless white looked more like a frozen moon than a habitable planet—except for that curious band of ocean, spread like a wicked grin.

Turning away, he walked down to the old galley. Counters were littered with coffee cups. He thought of crew taking a fi-nal swig, leaving the cups where they were in a lonely act of sloppiness. Why bother? No one was going back there.

Anatolly found himself sitting at one of the mess tables, head in his arms.

Weariness kept his head down. He thought he could hear someone cough down the hall, perhaps feet shuffling... a Ship memory of crew members preparing to shut down the whole deck. Don't need the room. Conserve ship resources. Say good-bye. That had all been long ago, before his time. His father described it, the shutting down of Deck Four. They'd ar-gued for years before deciding on it. The captain had outwaited them, until the opposition simply vanished. Or until he spied his moment to give the order. Timing, that was everything.

Or perhaps not everything. Courage was a thing, as well.

Anatolly dragged himself from the chair and wandered through the galley to the observation station. In a convex bub-ble, it allowed a view in three directions. Anatolly stood, watching the earth's dark side, where the lights came and went, leaving behind trails in his mind's eye. At the horizon line, the corona of the storm looked like a sun flare.

The damn thing was in his eye. It was like a thought that won't get born. Or that was born over and over every day as the globe turned. He was sentenced to watch it until...

He closed his eyes. Watch it until...

Until he got it. *Pay attention for once, Anatolly*. Without all the clucking geese, without all the unsolicited advice, the press of events. Just notice.

So he watched the spot dawn over the rim of the world. He didn't have a clue what the optical storm really was or what it meant. But somehow he knew if he just kept watching, some-thing would be clear to him. To him. Not to Janos, not to the priest. To him.

The storm came on, an unfolding polyp of light.

When, he asked himself, had it become so important to win? Why hadn't he noticed that, in thwarting a man who didn't deserve to be captain, Anatolly had become just like him? When had he let Janos Bertak take over his soul? The an-swer came: because *somebody* had to.

It stinks, Anatolly, can't you smell it?

Tears puddled in his eyes. "Stinks," he heard himself whis-per. A tide of self-recrimination moved through him. And out the other side. The thing was, it wasn't too late.

He stood, gripping the cool wall of the viewing station. He turned back to face the galley. *Clean up this mess. You there. This is your captain speaking*. Someone had to say the things people didn't want to hear. Christ's Blood, if you want to feel good, hire a publicist.

But a captain, now. That meant making some enemies.

He left the galley and headed down the hall, in a hurry, sud-denly, to get to the flight deck. He'd have a stop to make along the way.

Under the circumstances, he might need a well-placed ally. Someone who could handle a touchy matter of politics and timing. He knew just who to go to, by God.

The next day, just prior to dusk, the brothers came for Kelh'an. They were big, beefy boys. It was strange that the nuns thought three huge men would be needed to restrain her. She glared at them when they clamped onto her arms, but they paid her no mind.

"It'll look more merciful," Kellian snapped, "if you let me ac-cept my penance willingly." She could see one of them wrinkle his forehead underneath his cowl, registering thinking in process. He nodded at his helpers, and they released her arms.

Despite her lack of sleep, Kellian drew herself up into her best posture and set out down the passageway with her escorts. "I talk to Ice, you know," she said.

No answer.

She would have her fun with these fellows. And it was more realistic, to rebel. Too passive might look

suspicious.

"It doesn't like you torturing the witches. And it does know what you're doing." That probably wasn't quite true. But it might give them pause.

The sound of their heavy feet on the stone floor was her only answer.

Just before they turned onto the main corridor of the east wing, Kellian turned to them. "Don't worry about me. What happens to me isn't your fault. But you should keep your eyes open." She didn't expect a response, and she was right.

They began walking down the familiar hall of chandeliers and arched doorways.

There, waiting for her, were postulants and nuns in two long lines. She began walking down the middle. Far away, a gong sounded with every third footstep. She had been awake all night thinking about this moment. Now that it was here, it felt like something she remembered, instead of something she was doing. Behind the lines of watchers, brooms rested against the walls. They would sweep up after her, and shove it all out the door.

She passed all the people that she had known here. Sister Gretchen, Sister Roselyn. They looked at her with stony eyes. She was coming up on her dormitory. There was Alb, Jace, Mar, eyes glittering, was that with malice, or might it be tears? Then she saw an odd sight. Hilde withdrew her hands from the folds of her sleeves, and made a sign of a zero and a one with her fin-gers. And so did Jace and Mar. They were signaling her. Incred-ibly, they were saying, had found a way to say, we believe you.

Nit stood at the end of the dormitory line. She watched Kellian approach, her face red, her eyes puffy. Her fingers formed a zero and a one.

Now it was all Kellian could do to maintain her composure. As her pace lagged, the brothers grasped her arms, pushing her onward. The corridor wasn't nearly as long as it had once been.

Now she was in the rotunda. Mother Solange Arnaud stood there, immobile as a statue. At her side were Sister Helena, Sister Elisa, Sister Marta-Jean, and the rest of the inner circle. The hall was lit with meter-high candles, marking the high rite.

Kellian and her escort stopped in the center of the hall fac-ing the senior nuns. Sister Patricia Margaret Logue stepped from a mass of black robes.

"Kellian Bourassa," she began. Her voice was amplified in the marble rotunda, though she spoke softly. "I brought you among us for training in the contemplative life. To my shame, you have failed your apprenticeship. I renounce you." Though Kellian knew it was a sham, the words still hurt. She put on a defiant face.

Then it was Mother Superior's turn. Solange Arnaud looked appropriately calm and regretful. Her contralto voice rang out in the hall: "Kellian Bourassa, you have betrayed our trust in you. You are incapable of detachment, contemplation, and obe-dience. Therefore, I expel you from our sisterhood. I withdraw our protection. I banish you from our presence. I excommuni-cate you." Her arm came up like a black flag, pointing to the great double doors. "Let the barrens bring you clarity."

The brothers grasped her arms and turned her to face west. Then they began walking toward the great doors, where brown-robed guards slid out the bolts. The hinges groaned as the doors came open.

A biting wind slapped her face, and the smell of fresh air. Kellian paused on the threshold. She made eye contact with her escorts, and they allowed her to turn.

She swept her gaze around the hall. "I think God pities you," she said, her voice resounding in the hall. "But I'm not sure, because it's mostly Ice that answers me." She shrugged. Turned. She hoped the brothers wouldn't ruin her last moment by pushing her into the snow.

They didn't. She walked straight out the door.

She hadn't gone far onto Ice when food pellets started hit-ting the ground around her.

Rat food.

### CHAPTER TWENTY



Swan approached the shuttle. On foot, so as not to alarm them.

The children were already on board. It mustn't look like he was stalking them, so he had waited until they were trans-ferred, and the nun's sled had departed.

Above the mountains, the sun was giving up for the day. A sunset swelled purple and green like a contusion. It was the systems test. Swan had commanded a test, just in case. But he hadn't expected it to look like this.

"Please do not approach farther," a voice from the shuttle boomed at him.

Swan put up his hands. "I've come to trade information." He thought that sounded rather normal. Trading. Information. Words the crew could relate to. And it had the fine advantage of being true.

A long pause ensued. OK, they were studying him. Dressed in good furs, his hair pulled back, a pleasant expression on his face.

"Who are you?"

What the hell. "Lucian Orr. Scientist. Programmer of Ice." They were words he'd been longing to say. The very globe was altered by his programs. Not a perfect opus, but a spectacular one. Why shouldn't he take credit?

The Olympics swallowed the sun. The western sky bounced neon colors off thin, shredded clouds. And the intensity didn't subside with the sun. It grew.

"What is your preserve?"

Swan pointed south. "Seattle." They would know the old name.

Another long pause. They might think he was a snow witch. Surely they could see he was rational and normal, not some gibbering, tongue-tied mutant. But this Lieutenant Mirran would be cautious. Swan had listened to his every communica-tion with the ship. Mirran was careful. By the book.

The amplified voice persisted: "The programmers of Ice are long dead."

He was prepared for skepticism. Crouching down, he drew off a glove. He brushed aside a sprinkling of snow, clearing a small spot. Math was the easiest demo, to get the lasers worked up. He called on Ice for a calculation that might impress. A red beam of light lanced across the territory, converging on his hand.

He was sure they were watching him. "If I have your atten-tion," he called out, "I'll try another demonstration. How about the trajectory angle of your incoming flight relative to the earth's orbit plane?" He subvocalized the question, and Ice snapped a response. "Thirty-five and a half degrees, I be-lieve?"

The shuttle remained silent.

"Do let me know if that's a tad off. I'm always interested in calibration opportunities."

A new voice came from the shuttle. Swan guessed this was Mirran himself. The voice washed over the tundra. "What do you want with us, Lucian Orr? Clarify now."

No doubt he was anxious to get home with the load of jit-tery children, and back to his research. Especially with that ugly light show climbing up the sky.

"Lieutenant Mirran, I wouldn't postpone our chat if I were you. This is a onetime offer. I propose a technology swap, one highly in your favor. May I approach?"

The outside spot lights came on, creating brilliant ice flows in their pools. "Approach. Stay well clear of the ramp."

Swan's boots crunched against real ice, the remnants of the recent snowfall. The damn stuff was slippery. Slowly, he made his way across the darkening flats. He was in a hopeful mood. They had no reason to deny him the immortality drug—or the longevity treatments—or whatever they used. If it was expensive, he could pay. In the back of his mind he worried, though. If the gypsy had lied... But they had no children. How else did they continue?

His worry was tinged with hope. Emotions collided. It sur-prised him, the pleasure he found in the prospect of relin-quishing Ice's secrets. Ship would certainly retrieve its stored knowledge before they tried to eradicate it. Some larger good would come of Ice. He would have a place in history, not as a pariah, but a patron.

Ice's retreat would have to be gradual, of course. Something would have to be done with the bulk of it, the detritus left be-hind. All these were long-term practical questions. While they solved them, they could profit from Ice as a computational platform. As it got smaller, it would lose computing power. But its stored knowledge would not be jeopardized for decades, even centuries. Ice stored information redundantly now; no need for efficiency when you can sprawl as you like.

A wind came up as the sun set. It blew the furs around his hood and chilled his face. But it felt fine. He was a little hungry, but he felt fine. He let the breeze blow through him, through his pores. Cold, scouring wind. It cleansed him of sin and er-ror. He had always wanted to be not only grand, but good.

A man in a big parka stood a few meters away. Two armed guards stood on the top of the shuttle ramp, aiming their guns at him.

"Lieutenant Mirran, I presume?"

"How do you know my name?"

"Listening to your radio communications. Ice collects all kinds of data for me."

Mirran sized him up. He looked at Swan's hand, searching for something mechanical. The interface.

"Do you work with the Sisters of Clarity?" Mirran asked.

Swan coughed. "We do talk... but they're dependent on me. Like you, they can't break Ice's encryption."

Mirran frowned. "I'm not empowered to make decisions for my ship, Mr. Orr. I report to my captain. If you tell me the na-ture of your proposed trade, I'll discuss it with Captain Razo."

"You really should learn to make decisions, Mirran. Not everyone is patient with red tape." He smiled. "Me, for in-stance."

Mirran looked wary, even alarmed, by Swan's smile.

Swan felt a pang of annoyance. "Look here, Mirran. You re-alize, don't you, that I have access to Ice's programs? Put me to any test you like. I can teach you to interface."

Mirran looked down at Swan's hand.

Swan murmured, "My interface is subcutaneous. Yours doesn't have to be if I disable the encryption. You'll need to put together a good interface and compiler; I can help you with coding, if you need it."

"What do you want from me that can't wait?"

Swan glanced up at the men with the guns. "Mirran, after all that I'm offering, I don't expect to be kept out here freezing my ass off. And threatened with your guns."

Mirran narrowed his eyes. "We've had deaths out here. From strangers."

"Yes, yes, snow witches. They're dangerous. You've seen how they can't talk, half-crazed? That's not me, as should be clear by now." He decided against the disingenuous smile. "What will the captain think if you pass by this opportunity? Ask him."

Mirran jerked his head in the direction of the green glow. "Storm's knocked out our communications."

Swan sighed. "Well, then. That appears to leave the two of us."

Mirran was still giving him an impudent, blank gaze. "Tell me what you propose," the lieutenant said.

Swan collected himself. "Ice has grown too far. It was the in-evitable price for some of its calculations, but I can bring it back in line. And I'm willing to hand it over. It's too much for one man, alone."

Mirran's face was stupidly blank. Get to the point, he seemed to be saying.

"In return, you divulge your own secrets. Biological, physio-logical. Whatever you've learned." As Swan licked his lips, the wind dried them again.

"I don't understand what you're driving at."

"Mirran, I'm talking about your damn long lives." Now the man looked even more confused. "It's not right to keep that kind of technology for a few. Is it?"

Mirran glanced up the ramp, toward his armament.

"And I can pay, of course. Anything you want, if that's your demand."

"Long lives?"

Swan had to pause to take in a cooling breath. This lieu-tenant wasn't keeping up with the conversation.

He wasn't pay-ing close attention. Or maybe he was trying to withhold what he knew, keep the best for himself, push others away.

"Let's be straightforward," Swan said. "Zoya Kundara has made claims. Can we put aside the pretenses?"

"Claims?"

Was the man a moron? "I grow impatient with you, Lieutenant. Let me be clear: I'm interested in Zoya. Her talk about immortality." He cocked his head. "Was she lying?"

Again, Mirran glanced up at the ramp. Turning back, he said, "Perhaps you misunderstood her."

"I don't think so." Swan's mouth was so dry, the wind blew straight down his throat. "She said she was immortal," he croaked. "Perhaps something you learned on your long travels?"

Mirran wiped his forehead. He glanced back at the growing disk of the storm. "We may have much to trade, Mr. Orr. But not that particular item. Zoya isn't long-lived. She's been parceling her life out in periodic awakenings, as ship coun-selor."

"Parceling out?"

"In stasis." He shrugged. "1 suppose that's a kind of immor-tality."

Swan shuddered. "Parceling out. Her life." No, that wasn't *a kind of*. It was nothing at all. It was a patchwork thing, a damnable thing, a lying thing.

"That's it. Sorry." Mirran smiled for the first time. "She'll love to hear that she's immortal. That's a good one." He glanced up at the men on the ramp, sharing the moment's humor.

Mirran's open mouth looked like a red cave, his laughter like a seal barking.

Swan's fist took him in the side of the head.

Mirran buckled, crumbling to his knees at the force of the blow. Swan crouched behind him, hand on the ground. On Ice. Calling for a bit of a jolt, present square meter excepted.

The metal ramp zinged under the electrical surge. The guards staggered, fell. One was down on the ramp. Another had fallen to the ground. Swan dived for the second guard's weapon, retrieving it. The entry hatch opened as crew rushed out. Swan pressed his hand onto Ice, for another jolt of electricity. It danced up the ramp, knocking a crew member down, and locking the door open, as the onboard electronics faltered. Swan dashed up the ramp, into the ship, where lights were just flickering back on. He was firing, catching crew in a spray of fire and blood. He was firing and firing the weapon. *Love to hear that she's immortal. That's a good one*. Not a good one. Oh, it wasn't good, no, no, no, no. Nothing was good, would ever be good again.

Swan found himself crushed into the corner near a stowage locker. The corridor lay quiet, empty. *Parceling out her life. Peri-odic awakenings. A good one*.

"Get out, get out, all of you," he screamed. "Get out of here, or I'll kill you."

No answer, but for the bleating of the children.

He threw a line of fire into the cockpit area. "Get out, now."

Eventually a few of them bolted for the door. Three nuns passed him, as well. Where had they come from? He let them go. He didn't know what to do, but he knew he wanted the ship. He would fly it into the atmosphere and crash it into the plague ship. Or just crash it into the mountains. "Get out!"

The children were marching past him.

They stared at him and his gun. Their big eyes, staring. They were young, lost boys, staring into big guns. He didn't want to get the roles all mixed up. He was the innocent, not the one pointing a gun at children. How had it come to this? How had it ended so wrong?

A small boy stopped to look at him. Just at eye level, his large brown eyes gazing into Swan's.

"Get... out," Swan whispered.

But the boy didn't move. That made him angry. The boy should mind him, the boy should die. He'd be better off than growing up, growing old, losing hope. He latched on to the lit-tle upper arm, yanked him around so he didn't have to look in his eyes.

To his credit, the child didn't cry or wiggle. Just stood there, stiff as a soldier.

"Let him go, Orr," someone called. It was Mirran. He came to the foot of the ramp. "Let him go. Take me instead."

He could just make Mirran out, in the dim light of the re-serve generator lights. "Come up the ramp, then."

Mirran obeyed. As he came through the hatch, Swan shoved the child over to him. Not a murderer of children. Not.

When they were alone on board, Swan had to sit quietly to gain his equilibrium. He hadn't killed the boy. That proved he wasn't what they thought. Wasn't what *he* thought. No canni-balizing monster. He didn't kill the boy, he hadn't stooped that far. Since his life was drawing to an end, that was important.

He turned to Mirran. "You." Swan gestured to the cockpit. The lieutenant hardly registered on Swan's consciousness. He was the pilot function.

One last stop.

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The wind lashed into Kellian's face. Born on the escarpments of the Olom Mountains, it gathered speed as it stampeded over kilometers of bare Ice, coursing through the ruined city, and plowing into the Keep with nearly gale force.

Zoya had said walk north, but in this wind, Kellian's only hope was to find shelter. She walked, arms wrapped around herself, to the pile of metal some two hundred meters away.

The ruptured motor compartment and twisted runners told the story of a high-speed impact. The windshield was intact, though pitted with teeth marks, like a pockmarked moon-scape. Kellian had learned how Wolf had driven head-on into the tide of rodents, giving Zoya time to reach safety. The trader had been a welcome visitor at the preserve, bringing good trad-ing and good stories. Now she gazed on his life's blood, stained brown in the heavy dusk. Somewhere nearby, his bones were strewn across the Ice.

She gazed westward, listening for rats.

In that direction all she could see was the Ice storm, a vast plume of gilded green, both a laser storm and a mirroring bore-alis. It was time for something, Ice had told her, over and over. Kellian guessed the time had come.

The sled was lying on its side. Battery acid had seeped out, forming a small pit on Ice. The sled's runners faced the wind, and the passenger compartment faced the nunnery.

That small detail could save her life.

The windshield and body of the sled formed a small cave. Kellian crept into it.

Out of the wind, the cold bit less, but Kellian was shivering. Someone had told her that freezing to death was painless. Whoever it was, they'd never gone topside in a big wind. She tucked herself into a tight ball, pressing her hands into her armpits. This huddled misery wasn't the grand trek into the frozen wasteland that she had imagined. She had a moment's disappointment that her death might be so mundane.

As she gazed up through the open side of the sled, she saw the stars, looking like a hailstorm. Like they would fall on her. It would be a better death: quick and clean.

One of the stars was coming already, streaking across the sky. It was rumbling softly.

Kellian abandoned her huddle long enough to crane her neck out for a better view.

A boxy shadow approached, eclipsing the stars as it came. If it was Zoya's ride, it was early. Then it passed over her, dark-ened, no running lights.

The nuns, she thought, wouldn't like getting visitors in the middle of the night.

On the flight deck, Anatolly sat beside Janos Bertak, hands sweating enough to leave spots on his trousers. How in the cos-mos did people muster the calm to lie?

"When Lieutenant Mirran arrives," Anatolly said, "I want a general assembly. The crew should welcome the youngsters. A special event." With no response from Janos, Anatolly pushed on, "We'll make it an occasion. Something to celebrate."

Janos continued frowning at the screen, where the continen-tal storm raged a golden orange. The storm moved so slowly, it appeared stationary from orbit. But it was heading east. Losing radio contact with the shuttle wasn't unexpected. But Janos worried anyway. "Too much fuss," he said. "Might upset the youngsters."

"Yes, but if it's short, the children will hardly notice. The crew needs something to celebrate." He relished throwing Janos's own words back at him.

Now that Anatolly was insisting, Janos turned his attention to him. "Children don't need ceremonies. They need parents."

But I need the ceremony, Anatolly thought.

"Janos, you've been harping on me about crew morale. Now we've got an opportunity to celebrate. Lead the assembly your-self, if that's what you're worried about."

"I'm not worried."

Oh, but you should be.

A midshipman brought the bridge log for Anatolly to sign, which he managed to do in a tremulous hand. Janos didn't no-tice. He was no doubt savoring his approaching triumph. Once the children were integrated into Ship families, his popularity would soar. The captaincy would be his.

Anatolly put petulance in his voice. "It's just that I've given in about the orphans, and Zoya, and now you're thwarting me on every detail. Really, Janos, this is not the cooperation I ex-pected."

"All right," Janos said finally. "I really don't care. I'll say a few words to welcome the orphans. You'll stand by my side." *And keep your mouth shut*, was left unspoken.

"Good," Anatolly said, face neutral. Playing the old Anatolly. Peace at any price. By God, he liked the new man better.

Lieutenant Havislov entered the bridge. Right on time. He approached the command chair. "Captain, sir. Preparations are complete for the physio unit."

Anatolly nodded. He made it known he would inspect Ship Mother's physio unit and the amenities before she lay her head down. He'd ordered flowers. Janos was happy to keep him busy with such details. Zoya was to proceed directly from the airlock to the stasis chamber, no opportunity for sedition. We'd always need her as Ship Mother, Janos had said. Need her asleep, more like.

That was the one thing that Janos still needed Anatolly for. To get Zoya to lie down. How flattering, that Janos thought he could control Zoya. Sleep now, Ship Mother. Anatolly almost snickered, imagining her expression, after all that had hap-pened.

As Anatolly left the bridge, he passed Midshipman Novic's comm station. Novic was key to his operation. Radio operator. The two men didn't look at each other. Novic knew his job.

Loyal to his captain. That should have been all their jobs. But no sense dwelling on *ought to*. Better to concentrate on *go-ing to*.

He followed Lieutenant Havislov into the corridor. The poor fellow was swallowing spit he didn't have. Good man; he wasn't used to lying.

Anatolly and the lieutenant passed the stowage locker on Deck Two. The lieutenant opened the locker. Inside was the equipment gurney, holding tools, cleaning supplies, and one oversized bucket. Anatolly left Havislov in charge of the gurney and heard it rumbling behind him as he set a faster pace.

Janos Bertak had command of the bridge. Anatolly was os-tensibly on his way to the physio systems suite to inspect the progress for Zoya's *mothballing*, as she sometimes called it. The sense of normalcy was perfect, but it would only last a few minutes once the disruptions started.

Despite his nervousness, Anatolly felt decades younger. If people wanted a youth serum, they should try adrenaline.

On the officers' deck, Midshipman Vessi approached Anatolly from the opposite direction. For sheer size—and loy-alty—Vessi was worth any three crew members. And he was prepared to swing his ham-sized fists hard and fast, before oth-ers could make up their minds.

Vessi pressed the electronic probe onto the door's lock mechanism. The door of Bertak's private quarters slid open, and he and Anatolly entered. Anatolly asked the startled wet nurse, "Where's Lieutenant Bertak? This is an emergency."

The woman dropped her needlepoint, and stood in confu-sion. "He's on the flight deck..."

In the intervening seconds, Vessi had crossed over to her, pinning her arms and slapping an adhesive pad over her mouth. He made short work of tying her up, as Anatolly strode to the bedroom. Rebeka Havislov had assured them that Tereza would be engaged on Deck Six, training the volunteer teachers in child care. Rebeka hadn't disappointed. The bedroom was occupied by only one person.

It had been forty years since Anatolly had held an infant. He leaned over the crib, hoping the baby would be asleep.

Big brown eyes met his own from the bundle of blankets. Damn. Awake.

Anatolly smiled at the baby. "We're going for a buggy ride," he said. "So try to keep your mouth shut."

He reached in and folded the lump of blankets and baby into his arms, carrying the package like a nuclear warhead into the living room. The nurse was tied up, eyes frantic. Vessi had put a pillow under her head, but she didn't look happy.

He and Vessi stood in front of the door, hoping that when they opened it Havislov would be rolling by with the gurney. Anatolly pressed the door release.

Havislov was standing there with the gurney waiting for them. Anatollys heart sank. Too obvious.

Havislov looked stricken. "Hurry up." Down the corridor, a group of people were heading their way.

Without ceremony, Anatolly plunged the baby into the bucket, and strode off down the hall. It wouldn't do for him to walk next to a cleaning crew. He passed the crew members, who nodded in friendly fashion. He mustered a smile for them. Behind, came the rumble of the gumey, the squeakiest one they could find. It would mask the baby's gurgles, if not his screams.

Anatolly prayed that the infant wouldn't scream.

He pressed his wrist lex, indicating to Midshipman Novic that he was approaching the auditorium.

Within seconds, Anatollys prepared message jumped to every comm screen and lex on board. "Mandatory general assembly regarding the arrival of the orphans. All nonassigned personnel to the main hall, on the double. Captain Razo."

Janos and the flight crew knew very well that the shuttle hadn't arrived yet. But all Anatolly needed was to throw them off a minute or two with the reference to the general meeting. Janos would storm down to the hall, no doubt, but he'd be de-layed at least a few minutes. In any case, Anatolly was looking forward to seeing him.

Lieutenant Havislov rumbled the cart into the auditorium, Midshipman Vessi at his side.

Anatolly looked at the pail. The baby was quiet. "Is he all right? Not suffocated under the blankets, is he?"

Vessi piped up, "It's asleep, sir."

Anatolly wasn't convinced Vessi knew a sleeping baby from a dead one, but he said, "Bring the bucket." He climbed up onto the stage, where a large screen was already in place.

A few crew members began trickling in, then many of them, taking seats, and standing along the walls. A buzz filled the au-ditorium. Some had figured out the meeting was premature.

Anatolly's wrist lex lit up, signaling that Janos had left the bridge.

On his way then. Let the festivities begin.

"Please be seated," Anatolly urged the audience. He felt a little ridiculous standing onstage next to a bucket. He glanced down. The brown eyes were open again, above a quaver-ing lip.

Anatolly gently lifted the baby from its nest. As he hugged the bundle against his shoulder, the volume of voices in the room doubled. He saw the crew in the front row. Sava Uril, Niko Borjana, Edvard Marusic. These were just the ones he most hoped to reach: those young enough to have small chil-dren of their own. But who didn't have them.

Clearing his throat, Anatolly began: "This baby that Tereza

Bertak has been caring for is not an orphan." Short and sweet. He had to get to the point. A better orator was on the way.

The baby began to cry, a high-pitched screech that detracted from Anatolly's posture as defender of children. Vessi was standing at his side, God bless him. He plunged on: "Neither are any of the children and infants scheduled for delivery to the Ship today. Their desperate parents sold them. People of the Road, we have entered into a flawed—an evil—bargain."

Someone shouted: "What does Commander Bertak have to say?"

Anatolly had to raise his voice, startling the baby, who screamed louder. "Janos says you'll pay any price to start fami-lies. From what I know of you, my friends, that just isn't true."

"Where are the other children?" a woman shouted. Many others joined in that refrain.

Anatolly held up one hand, the hand that wasn't holding a twenty-kilo baby. "They'll be here soon. When they arrive, you'll have to decide. On the price you're willing to pay."

At that moment, Tereza Bertak stormed into the auditorium, dragging her nurse with her. Anatolly could see her red hair lit up like an emergency light. Her voice carried from the back of the room. "You stole my baby, Anatolly Razo. You beat up this poor woman and kidnapped my baby." She stormed down the aisle toward the stage. "Who do you think you are?"

Anatolly was prepared for that question. "Your captain, Tereza Bertak, that's who."

"Kidnapper!" she countered. Lieutenant Havislov blocked her access to the stage stairs. She turned to the audience. "The man is unstable. Look at him—putting a baby in a bucket!"

Heads turned as someone else entered the auditorium.

Janos Bertak stood gazing down the length of the audito-rium at Anatolly. He managed to make eye contact, like a laser beam.

"So, Anatolly," Janos said, "using force, now, are we?" He be-gan a slow walk down the center aisle, calming the uproar to a gentle murmur as he walked. "You've been under some strain. I understand. But you have to let that baby go back to his mother."

Assenting voices rose again.

Vessi was blocking the stairs, but Janos looked ready to vault up onto the stage.

Anatolly said, "This baby's mother sold the infant for the equivalent of eighteen Euros." There was more Anatolly had planned to say, but he deemed it the right moment to call in re-inforcements.

The screen lit up. The face of Father Donicetti took over the stage.

The priest fixed his audience with a withering glare. "Nor-mally," his voice boomed out, "I stay out of Ship politics. Not this time." Anatolly hadn't had time to coach him on what to say. He hoped he'd stick to the point.

"I haven't seen some of you at confession for a long time."

Mother of God, a sermon.

"After this, some of you will *need* to come." He cleared his throat and went on: "Since you seem to need an unbiased me-diator, I have taken it upon myself to do some investigating."

Janos made the leap onto the stage. Agile, he was. Vessi rushed to restrain him, then Janos's supporters were moving to his side. Their presence on the stage obscured the screen, but the priest's voice droned on.

"I asked the leaders of Ancou preserve where Tereza Bertak's baby came from, and they freely admit the babe was sold. Sold. Lest you think I'm siding with Anatolly Razo, let me introduce you to Worley, leader of the Ancou preserve."

Worley's florid face filled the screen. "... a fair price," he was saying, amid the commotion in the hall.

The noise subsided as people stared at the screen.

Worley went on: "We try to limit our population, but we do have excess children despite all we can do. Our people are only too happy to sell the excess for a good price. The nuns are our best customers. But we assure you, we won't take advantage of your—plight. The ship can count on fair prices." The man smiled, a wobbly grin banked in double chins. "We look for-ward to doing business with you."

Now Donicetti came back on the screen, driving home his point. He was not in a good mood. His lecture was actually a good one, even inspired. Unfortunately no one heard the rest, as the auditorium erupted in voices and arguments.

Anatolly held up his hands for calm. "Please, please," he called out. "You're frightening the baby." Actually, the baby had begun settling down as Anatolly jiggled the infant against his shoulder, something he remembered doing about a hundred years ago.

A few people resumed their seats, and the room quieted. He turned down the volume on Donicetti's sermon. Every now and then, Anatolly heard a word, like, "parents."

"decency."

"white slavery." But the focus of the audience was on Janos.

Janos Bertak turned to face the auditorium. "They live in squalor. Starving." Under hostile gazes, his voice sounded for-lorn. "We're doing them a favor."

Donicetti's sermon ended, plunging the hall into total si-lence.

Tereza knew his moment was over. She glared at her hus-band. "You miserable pig," she growled. "You told me he was an orphan."

Janos turned to face her, his face tender for the first time since Anatolly had known him. "I thought you wanted a baby," he said. He looked at his wife miserably. "I thought it would make you happy."

The look on her face was terrible. Even Anatolly had to look away.

Carefully settling the infant back in its bucket, he waved the security guard forward. It was time to put Donicetti's speech to the test.

"Janos Bertak," Anatolly said, summoning his most com-manding voice, "I accuse you of crimes against this Ship and our people. Of the death of Sandor Laslo. Of kidnapping and conspiracy to mutiny." He lifted his chin to signal the guard to come forward. He waited a few beats.

"Take him to the brig." It was a line Anatolly had been practicing in his head for days.

Janos looked up at Anatolly. His voice was low and steady. "I didn't think you had it in you."

Anatolly smiled. "Neither did I."

Janos swept a gaze through the hall, gauging his support. There wasn't any. He shook off the hands coming around his arms to guide him. They took his lex from his wrist, and he marched up the aisle amid a profound silence.

Anatolly turned to Tereza. "Come here, Tereza Bertak."

The woman climbed the stairs and crossed the stage. To her credit she came with head held high, red hair on fire in the projection lights.

"Until we get this straightened out," Anatolly said, "I'm put-ting you in charge of this baby. Will you care for him a few more days?"

She nodded. Her eyes weren't on Anatolly, but on the infant. This wasn't going to be easy on her. Perhaps her least of all. She reached out for the bucket.

He handed it to her, noting the big brown eyes still watch-ing him. Tereza took the bucket and swept off the stage like a diva. A few people in the audience clapped, for whatever reason.

Anatolly shook hands with Vessi and Havislov. Then he de-scended the stairs and moved through the crowd, stopping to talk to the crew, taking time to answer questions and listen, and listen some more. They were his people. But it had been some time since he'd been among them.

# **CHAPTER TWENTY-ONE**



The land sang with silent light. The optical storm fired the ground, reversing the normal order of things: luminous land, darkened sky. Abandoning the shed shelter, Kellian felt herself drawn to stand in the midst of it, a witness to the outpourings of Ice. All around the sled, spread out before the Zoft, and throughout the basin, streams of light surfaced and vanished, again and again. Giga beams of red and violet shot forward from point to point, crystal to crystal, in geographic rays.

Overhead a molten curtain hung from the stars, a borealis so massive Kellian thought she felt the wind from its surging folds. Bolts of laser light streaked over the barrens in all directions, or-ange and red and a hundred others. Her dark skin took on the overtones of the land. She was an instrument on which Ice played its rhapsody of light. Those who worshiped Ice were wrong, yet Kellian felt an awe of this thing.

Alone on a snowy basin amid such a shining thing, she could only feel how small she was, how temporary. Despite her peril, she felt oddly grate-ful. Not grateful to Ice, exactly, but grateful for her life, whatever was left. The Keep's walls loomed stark and tall, spotted with feeble windows. Such a great wall, but such a dead thing. Kellian spread her arms, closing her eyes, letting the lights play on her eyelids, tapping, tapping as though to get in...

A scrunch on the Ice behind her. She whirled.

A radiant shape stood a few paces away, gown fluttering in the wind. It flickered gold and purple, a flame sprung from crystal. Struck dumb, Kellian nearly buckled to her knees. Col-ors radiated from it. It was the ghost of the world, the angel of Ice, come to enunciate a great purpose...

The shape drew nearer. It was a woman in a robe. A white robe, like Kellian's former one. It was Hilde. Her white robe flickered with reflected color.

She came forward, carrying something. Then she threw a heavy cape over Kellian's shoulders.

"It's time," she said.

Kellian heard the words. It was as though Ice itself spoke them, as though Hilde were under Ice's rapture. Her eyes felt like frozen balls, melting at the edges. Hilde gripped her around the shoulder. "Steady," she said.

Kellian whispered, "Time for what?" The robe was hideously cold, but she clutched it to herself.

"To nip at their feet." Hilde glanced at the sled. "Is his body in there? The sled driver's?"

Kellian shook her head. He was scattered on the barrens. "Why?"

Hilde paused, scanning the surroundings. "Sister Patricia Margaret's looking for something he wore. A medallion around his neck." She looked back at Kellian. "Never mind. We'll find it later. You look half-frozen."

Hilde led her toward the Keep, pulling her along faster than her aching feet wanted to go. They were headed to the refuse pile.

"We had to let them put you out. But we always had a plan. We're going to nibble away at them. Guerrilla tactics."

It was only just registering on Kellian that she was going to make it. Her voice croaked, "Guerrilla?"

"Sister says its a term of war. We're using guerrilla tactics, like the Hall of Horrors." She smirked. "We've got a new dis-play up."

They were coming up on the ancient refuse heap of the Keep. It was strictly nonedible, to discourage rats, but it was a profound heap, just the same.

"A new one?" The Hall of Horrors hadn't altered for thou-sands of years.

"This one shows the nuns themselves. Cutting open snow witches to find their interface."

"Solange will have your head."

"Only our converts know how to activate it. It'll be discov-ered soon enough, but by then, we'll have made our point."

They stood in front of a small door cut in the stone. It was big enough for them get in, one at a time. The nuns brought small refuse through this door. Bigger things were shoved off the ramparts.

"The alarm's disabled for a few minutes, but we've got to hurry" Hilde knocked, and the handleless door swung open. Nit was crouching there.

The youngster took a quick look at the pulsating barrens. Then held out her hand to Kellian.

Kellian scrambled in, embracing her friend. She kissed her on the cheek. Her lips were so cold she thought they might leave burn marks. Then she pulled back, looking at Nit. "Breaking the rules, I see," Kellian said.

"Yes. Rule 604. 'No rescuing outcasts." Nit smirked, then led the way. "Hurry."

As the three of them scurried, stooped over, through the narrow rock passage, Kellian said, "Thank you." It was a simple phrase, and not enough, but it needed saying.

From behind, she heard Hilde snort. "You may not thank us when you see what comes next."



Zoya was climbing endless stone stairs. Brother Daniel led the way up and up, their shadows jumping around them from his handheld light.

This was the young man she'd seen at Solange's apartment yesterday. When Sister Patricia Margaret handed her off to Daniel, Zoya was heartened that the conspiracy included some of the brothers as well as the postulants.

He carried her satchel over his shoulder, and still he hardly registered the aerobic challenge of rushing up hundreds of stairs. "Hurry," he said. "Before they find your cell empty."

"If I go any faster, you'll have to carry me the last flight," Zoya huffed. She wasn't in the best of shape. Given her lifestyle, it couldn't be helped.

Someday she would lead a normal life amid gravity and mundane events. That is, if she wasn't excommunicated by the nuns or her Ship. Ah, the prospect of a normal life... days in true succession, daily chores, domestic happiness. What most people took for granted—but it was a wonder. It filled her with plans and hopes, and not for the first time, either. At one time she might have married Anatolly Razo, after all. And, recently, she had also considered a certain tracker of witches. Had con-sidered the strength of his body, and the fire of his heart. But it was a heart given to someone else. And buried now, in the snow of days.

They stood before a door at the head of the stairs.

"I don't have much time," Daniel said. "Solange is expect-ing me."

Zoya raised an eyebrow.

"Yes, I bed her. I learn things that way, though she's careful with her words. It's just one way we work against them."

"To what end?"

"Freedom. What else?"

*Control*, Zoya supplied in her mind. Men once controlled such a hierarchy. But it wasn't her battle. Not for now.

Daniel opened the door, leading the way onto the roof.

Above the Keeps ramparts, the sky rippled. Queen Ria's lights filled the well of the night, shifting over the agitated land. From her position near the roof access door, Zoya couldn't see the ground, but she knew the storm was upon them. Some-where on the barrens Kellian Bourassa wandered, cold and alone. But there was no time for such thoughts.

Daniel urged her toward the Ice wall.

As they approached it, she fancied a chill wind blowing down its side, but Ice wasn't cold in itself. It was only the loom-ing crystal that suggested frozen water; instead it was frozen thought, frozen data. Behind her, it seemed some of that millen-nial thought was springing free, jumping into a blaze of rage.

Zoya drew out the experimental interface that Lieutenant Mirran had given her. Looking at the Ice wall, she gauged where she could most easily reach it.

Daniel pointed to a place along the wall where Ice was only an arm's span away.

Zoya toggled the unit on. "Will they be able to tell I'm com-municating with Ice?"

The brother looked at her with high amusement. "Only if they're up here looking for stray laser light." He jutted his chin toward the storming lights below the Keep wall. "Your activity won't be noticed."

Directing Daniel to hold the small optical box against Ice, Zoya closed her eyes for a moment, summoning her wits. She had thought about how to begin. She did so, keying New En-glish into the screen: This is *Zoya*, a human who has lived over 250 years. Speak to me.

The screen jumped to life in an instant.

Come now.

Daniel's hands began to shake. Zoya rested her hand on his arm, steadying him, lest he drop the interface into the crevasse that separated Ice from the Keep wall.

She keyed, You must prevent Lucian Orrfrom invoking the pro-gram that destroys you. Your destruction will bring ruin. Can you override?

Come now. Hurry up please.

She glanced at Daniel. He wasn't looking at the screen, as she expected. He was looking up. She followed his gaze.

Lit by the strobing flashes from the barrens, a figure was rapelling down the Ice cliff. Long hair fluttered in the wind. It was the tall witch.

Daniel began to back away from the wall, staring at the ap-parition.

Zoya grabbed him by the arm.

"What's going on?" Daniel whispered.

"Hold the interface," she hissed.

He glanced at her, then the Ice wall. Then he moved back into place, his eyes fixed on the figure's descent.

Her own hands were shaking. No time left now. She keyed: *Come where*?

Come to coretext. Hurry up please.

Zoya looked up at the witch's progress. He was moving rap-idly, approaching the roof. Down the plane of Ice he stalked, on long legs, like an insect's.

But Zoya concentrated. Where is coretext?

Latitude 47.36 n, longitude 122.20 w.

She keyed furiously: *But where is that*?

The witch jumped down onto the roof.

Down the tang tube from here to there.

Whatever that meant, Zoya was out of time. She grabbed Daniel's arm. "Run."

He fumbled with the interface, finally plunging it into the knapsack.

They rushed to the access door, slipped through, and began pounding down the stairs.

"What's going on?" Daniel demanded.

"That man is pursuing me. He's dangerous."

"I'll call an alarm."

"No. Then I'll be discovered, too. What is coretext, Daniel? How the hell am I supposed to go to coretext?" They rounded the landing, and continued their headlong rush downward. "And what long tube?"

Behind them, a clunk, like a door closing.

Zoya was not much one for prayer, but Father, protect me, came to her lips.

Heavy boots on the stairs above.

Down and down they scurried.

Fleeing into the darkened anteroom on ground level, the two of them raced for yet another door. Daniel was guiding her. This was his place, she must follow him. He turned, softly shutting the door, then led her down a very narrow stairway, into what had to be the basement of the Keep.

They trod as softly as they could. Silence all around.

Before a battered wooden door, Daniel turned to face her. "This is the brothers' wing, and where the long tube is. I've been in it. There's a place where Ice has built a pavilion. Solange thinks it's the master node of Ice. That must be where Ice wants you to go." They emerged into a long corridor formed of stone block.

Several brothers were in the hall, just passing. They nodded at Daniel, but eyed Zoya.

"Any nuns?" Daniel asked them.

The brothers shook their heads.

"Guard the door. Let no one through." The men moved quickly to obey.

Then Daniel was running, Zoya by his side.

There was no time. Lucian Orr would find her, prevent her. Perhaps he knew she had just been given a chance by Ice, knew she planned to challenge him for influence over Ice. Or perhaps it was that he hated her. She remembered the look in his eyes at Errors Rock. Yes, it was hate.

But no time, no time. It only mattered that Ice said, *come now*. She didn't want to think how she would ultimately come to Ice—the way she must, the only way flesh merged with crys-tal. Oh Wolf, she thought, what am I doing?

They came to a narrow, inconspicuous door. Entering, she saw rows of shelves and musty pieces of electronics. Daniel touched a pad on the wall, and one of the shelves began swing-ing open, revealing that the wall was thin there. Behind it, a stairwell sank into blackness.

A cold draft blew into Zoyas face.

"The tube?"

Daniel nodded. "It's a train tunnel, from the time of the Ecos. Down there, below Ice, below real ground. You can't use the train, though, only the tunnel. Only Solange uses the sys-tem. And she'll detect any train use. The Keep is defended against this as an invasion route. You'll have to walk."

Zoya turned to him. "How far is it to coretext?"

"Fourteen kilometers."

Zoya's legs already felt used up.

"There's somebody who'll help you," Daniel said.

In the corner, a movement. A figure stood up.

Daniel smiled. "She needs to get out of here as much as you do."

Kellian came forward.

"We're going to the land of rats," the young woman said.

Zoya embraced her. "Safe and sound. Good." Then she stepped back, holding Kellian by the arms. "But, *land of ratsl*"

"Seetol. It's where the rats live. I don't think they've invaded Lucian Orr's lair. If they had, they'd have eaten the chained nuns."

"Chained nuns?"

Daniel interrupted: "I have to go." He handed over his handheld light. "Remember our plight, Zoya. When all this is over, remember our struggle."

Zoya took his hand. "I have a long memory, Daniel. Thank you."

She and Kellian moved to the gaping hole. There was no time to plan, or even to think. The tall witch was loose in the Keep.

They plunged down the stairs, toward the long tube.



The brown wool scratched against Swan's face. The warmth of the corridors, combined with his runaway metabolism, turned on faucets of sweat. He longed to throw off the robe, but needed the disguise. The robe hit him rather high on the an-kles. He'd taken the robe from the tallest brother he could find, but they were a damnably short breed.

Late at night as it was, he passed only a few nuns and postu-lants. *Just mind your own business*, he thought. Fortunately, they were trained to look at the floor, not at brothers. His hunger surged at the sight of them. He had almost harvested Lieutenant Mirran, but left his pilot bound up inside the shuttle instead.

The dwellers here walked with sodden patience. He, though, was in the most pronounced hurry. To have to walk like a sleepwalker demanded restraint.

He'd wasted a good half hour holed up waiting for a brother of a decent height. Meanwhile the gypsy had fled. Fled where? The brother he'd interrogated had said she was in a cell. That was wrong. She had just been up on the roof, and then she came down, a few steps ahead of him, and then vanished, she and her accomplice, vanished into the corridors and thousands of doors of the fortress.

The gypsy had suckered him. Not immortal. He was sur-prised at himself, how much he despised her. And not just for the lie. She had much to atone for. Not just the lie, but for the pits of childhood... He could afford to wait a few more min-utes to complete his business in the world.

Heat built up under the brown hood, as a deep chill coated his face. He was both fire and ice. Failure and success. Evil and good. It was a terrible mixture, an intolerable one. He wasn't worthy to live a long life.

And now he knew the truth: Nobody was. Best to begin all over again, let the world ignite. Somewhere else, far from there, let life begin again the long ascent. Maybe do a better job next time.

He stood in front of the lovely carved doors of Mother Superior's room. Fat drops of sweat plummeted from his face, splashing darkly onto the marble floor.

He hadn't thought about how to get into the suite. Knock? Solange, dear, it's me?

Trying the door, he was surprised to find that it came open in his grasp.

A dark room. The only light came from the narrow windows spraying light from the storm.

The room was empty. He spied another door, left open. He crossed to it, pausing on the threshold, letting his eyes adjust. He heard rustlings. A window flashed violet, and in that rosy light he saw two people locked together on a bed, twisting.

He saw the sculpted muscles of a man taking his pleasure. Solange was under him, murmuring. The man's skin was slick with sweat, like his own. He considered letting the man have his last surge of pleasure. Light fluttered again and again from the window, revealing the lovers on and off. The pace quick-ened. Getting there, OK.

Without warning, his eyes burned with tears. They were lost to themselves, giving in to each other. He

remembered that los-ing, that giving, the sweetness of the present moment. Instead of present moments, he had wanted a lot of moments. Now he wanted none of them.

The man's frenzy took hold of him. Then hers. The lovers slumped together, quiet at last.

Swan made it to the bed in a few strides. He saw Solange's eyes light up in alarm. He pulled the brother off, slamming him against the headboard. As Solange rolled away, he lunged, hauling her back.

Swan was leaning over the bed, ready to strangle her. Over-stimulated. OK, easy now.

She recognized him with his hood thrown back. "My robe," she said, as though in high ceremony, and not naked amid a tempest of sheets. Her eyes flicked to the nearby chair.

He relinquished her arm. "I'll break your neck if you call for help," he said, as she dressed. He pulled a cord off the drapes and approached Solange's lover, who lay dazed.

"Let him be," Solange said. "It's me you came for."

Swan paused over the brother. A young man. Skin clear and fine.

"Don't hurt him," she said. "Please, Swan."

Yanking the bond tight, Swan pinned the man's arms behind him. He looked again at the man's face. Handsome, yes. Familiar.

Solange drew nearer. "I've been looking for you. Why did you go away?"

She still had hopes and plans. She still wanted something from him. She didn't know. "It's over," he said. He wiped his mouth, where saliva collected.

"No, Swan. Not over. How can it be over?" Her face was full of life, full of the moment. "We've come so far. The ship does my bidding. Zoya is in disgrace. All as we planned."

He watched her lips move, her teeth gleam, as Ice exploded outside. The world was collapsing, and she was chattering.

"Over," he whispered.

"Something's happened. Tell me, Swan. Let me help."

"Help." She thought she could fix things.

Her mouth stretched on one side. "Yes," she said carefully, as though talking to a child, a not-very-bright one. She watched him, waiting to help him. But she didn't know him, would never know him.

"Please, Swan."

OK. He would tell her. "The promise was," he said, knowing it was useless to explain, but yet wanting to explain. "The promise was, if you die once, you don't have to again." He wanted to say more. There was so much more. But it hurt to talk. He was a witch. He wasn't supposed to talk.

But he wanted her to see. He wanted to be that naked brother, folded in the arms of a listening, responding woman. He wanted to take her. To be taken.

He began to talk. "I was there, when it all happened. At the Advent. It was my chance to take what was

owed me. Looking Glass was growing, it was going to protect the whole earth, get so big. And the wasted part? The wasted part was what it could *know*. It was a waste to use Glass only for an umbrella. I didn't jeopardize the data it stored. It could store every bit, everything in one square meter of itself. I used the rest of it, Solange. Gave it a mission. Set it loose to prolong human life. If it could."

When she opened her mouth to speak, he held up a hand, stopping her. "It can't."

He nodded, as understanding came to her eyes. "Can't," he repeated. His tone dropped an octave. "Now do you see why it's over?"

"Swan... Lucian..." She hesitated, not wanting to give of-fense. She was afraid of him.

"Pick one," he said. Which would she pick?

She swallowed. "Swan, then... how do you know Ice—can't?"

"You haven't been listening, have you? I talk to Ice. It talks to me. We talk, OK?" He was shouting. Lowered his voice. "I've been to Error's Rock. It's an information stack. It shouldn't be there. It's an anomaly. I figured out how to ask Ice what the damn big problem was. It's me."

He came closer to her, and she couldn't back up any more because the divan was right behind her. She'd picked the wrong name. He wasn't Swan anymore. There were no swans. But she wasn't listening. He locked on to her upper arm. "Come over here."

She leaned away from him, mistaking his intention. No, he wasn't making a move on her, asking for her body. But it hurt that she thought so and signaled her distaste, pulling away from him as much as she could.

He yanked her into the middle of the room, dragging her over to the window. She cried out in pain. He might have dislo-cated her shoulder. She moaned.

He had forgotten his own strength. He'd hurt her, and hadn't meant to.

He pointed out the window. "Ice is very sick. That's a fever, out there. A brain fever. What did you think it was, a pretty show for fun?" He forced her to look.

"My arm..." she whispered. "You've broken it."

He looked at her in distress. Now she would never listen. If he thought his heart was ragged before, now he learned that there was no end to how much it could hurt.

The window latch was a simple affair. As he swung the win-dow open on its hinges, winds of light swept across the deep reveal onto their faces. "Ice is sick. That's what the storm is. The kind of EEG you get from a grand mal seizure."

"Let me help you," she whispered. "We can redirect Ice. Don't give up."

No. He didn't want fresh hope. It was worse to hope, to open windows onto what you so desperately wanted, only to find there was nothing but smiling men pointing their rifles at you, nothing but a woman pulling back from you.

"No," he whispered. He knew he was going to kill her. There was a reason for this. That he would hate himself for do-ing it. Finally, and at last. Then he could die.

He said softly, "You never liked me, did you?"

She saw that his mind was made up. Her face composed it-self, now in shadow, as she turned away from the window and faced him. "No," she said. Her chin came up, eyes meeting his, her voice steady. "Not my type."

He snapped her neck.

The brother was conscious. His expression was terrible.

Swan wiped his mouth. Then he wiped his teeth, pulling shreds of meat out of them. Once Solange was dead, a desper-ate hunger had come over him. Now he was satiated. He felt drowsy. His mind wandered. He looked at the brother.

"Do I know you?" Swan asked.

The brother shook his head.

But then Swan thought he knew. This was the brother who was on the roof with the gypsy.

Swan stood up and stripped. Donning the other brown robe, the one thrown over the divan, he approached the bed where the bound man lay.

"You know where the gypsy Zoya is?"

The brother shook his head.

But eventually, he did know.

#### **CHAPTER TWENTY-TWO**



Zoya looked at Kellian in the dim spray of light from their lantern. Despite her exposure on the barrens, the young woman looked fresh and strong. For her part, Zoya wasn't nearly as able-bodied.

They stood on the loading platform in front of the sleek steel train. Zoya shone her light on the engines side. *East Is East*, was its name. And under that, *UrboUnk*. It was a well-preserved example of twenty-first-century rail technology. Daniel said they kept it in repair. It could whisk them to core-text in minutes. Zoya was sorely tempted.

"Kellian, a man is following me," she said. "It's Lucian Orr. He broke into the Zoft. I managed to escape, but he won't give up. You'll be in trouble if you're with me." —

The younger woman smirked. "There's trouble in either di-rection, then. The nuns will kill me if I go back."

"Knowing Lucian Orr, I'd take my chances with the nuns."

Kellian's smile fell away. "I wouldn't."

"He's a snow witch."

Now Kellian was silent. At last she said, "Let's take the train."

"Daniel says the nuns will know if it's in use." Zoya glanced at the train. It was a choice between stealth and speed. But it was also a question of whether she could walk fourteen kilometers.

Zoya considered her options. They were all fairly ugly. "To hell with the nuns," she said. "Do you know how to operate this thing?"

"Bet I could figure it out."

Zoya liked the woman more and more.

But the first problem was how to get into the train. The doors were closed.

"Emergency access," Zoya said. "There's always a way inside public transport from the outside."

It was the window. In their hurry, they dropped the window on the landing, setting off a deep echo down the tunnel. Zoya hoisted Kellian up, then Kellian helped Zoya clamber inside.

Kellian said, "When the nuns detect the train moving, it'll take them a few minutes to shut us down. By that time we'll be way down the track. With them on foot, we'll have a good hour's head start on them."

"No, we won't." Zoya looked over to a large, arched opening on the other side of the train platform.

There was a pause while her companion seemed to consider whether there was something she didn't know much about.

Zoya went on, "The nuns didn't build this as a shuttle sys-tem. Daniel said the Ecos built it for Seetol and the other local cities. If so, this system might have two sets of tracks, one for each direction of travel. The name of this train is *East Is East*. If there's another tunnel next to this one, I'm betting it's got a train called *West Is West*."

Kellian considered that news for a moment. "Parked on the other end, in the west, like its name?"

"If you were in charge of the Keep, where would you park your trains?"

The young woman's face fell. "Both of them here, in the east."

Zoya nodded. Like a two-car garage.

Daniel hadn't been nearly as tall as Swan.

His robe hit Swan at mid-calf. The few nuns who were still awake so late at night glanced at the ill-fitting robe. But the short robe suited better than the gory one. And what were they going to do, sound the alarm over bad dress?

They would indeed sound the alarm when they found the two bodies. Or, three, counting the first brother he'd killed. That was bad, losing track of how many people you'd just killed. But such considerations were behind him. No pretenses at goodness. He'd killed and killed. It didn't matter anymore. They were all dead in an hour anyway.

He felt sick to his stomach. The look on Solange's face. De-spising him. But still, to have broken her neck... it sickened him. And he fell upon her, hungry. It didn't bear thinking about, and the joy was, he wouldn't have to think about it, ever again. Too much thinking. That was the whole problem of life in three words.

Pass through the east wing, into the first door at corridor's end, down the stairs to the brothers' wing, find the fourth door on the left, the secret door to the rail station...

<sup>&</sup>quot;You don't know much about train systems, do you, Kellian?"

He found the door he was looking for. Entered.

Rushing to the forward drivers station, Zoya and Kellian found the driver console studded with switches and controls beyond what seemed strictly necessary to turn on a train and let it run down the track.

Kellian studied the console, brow furrowed.

"Let's start pushing buttons," Zoya said.

Kellian was calmer. She was analyzing, as though enjoying the challenge.

"Hurry," Zoya suggested.

The console lights strobed on as Kellian threw a switch. "Ready, then."

Kellian punched at the controls, once, twice. Lights came on overhead and the engine began with a whine.

"Hang on," Kellian said optimistically. The train started groping down the track as though it was dragging the world behind it.

"I could jog faster than this," Zoya muttered.

"Inertia."

"We haven't got time for inertia." Zoya kept looking behind, out the window.

At last inertia switched in their favor, and they were flying down the tunnel.

Swan was in the brothers' domain, the basement of the Keep. The corridor was empty for now. He rushed onward, according to Daniel's directions, entering the storage room: *thejagade of shelving...the hidden lever...* 

Through the soles of his boots, Swan felt a tingling. The floor was vibrating. He threw the lever upward, opening the wall, revealing stairs leading down. He pounded down the stairs, into the earth.

At the station platform, the train was gone. OK, then, she had taken the train. Of course she had.

Well then, he would catch up with her at core text. *Tell Ice that I am immortal*. He knew well enough the ruse she planned. None of that could matter now. She'd have her wish that Ice stop growing. But like most desires, it wouldn't happen in the *way* that she wished...

An ornate archway led into the adjoining tunnel, the one Daniel had described. There Swan found his personal trans-port, a monster of a vehicle, a one-man train. With a nod at Kipling, *West Is West*.

In front of him, the engineering control panels bristled with knobs and switches. He found the power switch, toggled it on.

Flipped another switch. Nothing. Then another. The whole console lay speechless and sullen.

Get moving, you great cow. He flipped another toggle. Nothing. He turned away from the control panels, trying to control his breathing.

In another moment he'd torn the drivers chair apart. Bits of stuffing from the upholstery settled around him, rushed up his nose as he breathed.

He swiped at the dust, clearing his eyes. A small screen on the dashboard showed a light moving down a straight path. That would be the other train. In a rage, he slapped the con-sole, hurting his hand.

But the train started to move.

The dim light of the coach interior threw a strobelike flicker onto the walls of the tunnel, as *East Is East* sped onward.

Kellian, seated at the controls, looked up at Zoya, still hardly believing she was on a train with the star woman. She had lots of questions of this woman. But one stuck in her mind. "Zoya," she asked, "what is the damage Lucian can do? You said he can do a lot."

Now Zoya knew how the Ship captain felt, every time he had to awaken Ship Mother and give her bad news.

"Kellian, I told you about the longevity program, the reason that Ice is in a runaway state. That immortality program has failed. Snow witches are the result, half-mad, living to eat. I think Lucian Orr would rather die than live like that. And he'd rather we all went with him."

"How?"

"There's an ancestral program. A self-destruct program. It was designed for a time when it was still possible to destroy the bulk of Ice without—side effects. At the beginning the programmers worried about runaway growth. But given the entropy threat, they went ahead with spreading Ice as fast as they could." She paused. "There was a fallback program. To de-stroy Ice."

"How? It's everywhere. It's everything."

"Nothing is indestructible, Kellian. Not even Ice is immor-tal." They were passing a substation platform, one of no doubt dozens along the corridor between the railhead and the great city. "The self-destruct mechanism is a simultaneous firing of the body of Ice. When Ice covered only a few patches of ground, the result would have been a series of small eruptions. Now, it would be catastrophic. But invoking that program would destroy everything Lucian has worked for. And right now, he's focused on me, it would seem. I'm keeping him going. I mean to keep him from suicide." It sounded good, spoken aloud. Sounded confident, brave. All the things she didn't feel.

Kellian stared out the window into the black maw of the tunnel. "Suffering," she murmured.

"Suffering?"

"It's the optical storm outside," Kellian said. "I've never seen it happen before. So something new is bothering Ice." She turned to face Zoya. "It's the suffering. Killing the world may seem like suffering to Ice."

"This is a smart machine?" Zoya muttered.

The young woman said, "Lucian Orr's been testing the self-destruct program. Ice is upset about it. That's what the optical storm is."

Zoya closed her eyes. Jesus, Mary, and Joseph. Then she opened them. "Step on it," she said.

"What?"

Zoya fixed her with what she hoped was a commanding gaze. "Fast as it can go. Now."

The tunnel whipped by them as East *Is East* rushed on at maximum speed. Kellian looked down at the knapsack on the floor of the engineers booth.

"Daniel said you have the interface." At Zoya's nod, she went on, "So what are you going to do with it?"

"Talk to Ice."

"Right. But to say what?" She was scanning the console in front of her, learning more and more about its ancillary sys-tems. She glanced up at Zoya. "And who's going to talk to it? You or me? Ice knows me better." No disrespect to this woman of the star ship, but it was *her* diary that Ice read, after all.

Zoya nodded. "It knows you, yes. But it needs to know *me*." Kellian waited for her to go on. The kilometers flew under the train. Five to go. "Kellian, Ice is processing information with some show of consciousness. But it still has programs that it's subject to. What we don't know is, how subject is it to program commands?"

"Ice doesn't want to be subject," Kellian said. She thought that was true.

"It may not matter what it wants. But if it has even a narrow range of choices, we need to convince it to make the right choices."

"Then I should be the one talking to Ice," Kellian said.

Zoya turned to her. "No. It must be me." She went on before Kellian could interrupt. "Because I am immortal."

Kellian shook her head. "Stasis isn't immortality."

"My gamble is that it's close enough. It's enough to release it from its logic loop. Since Ice is still a mixture of commands and consciousness, we need to meet its basic needs, to fulfill pro-gram goals. If I can help Ice out of its dilemma, maybe it will listen to me about the rest."

"How can its dilemma matter, if it's going to self-destruct anyway?"

"Maybe the dilemma doesn't matter, logically." Zoya smiled.

"But until very recently, that longevity program goal mattered. It's still programmed in. It's an annoyance to Ice. Maybe like having a ferocious headache when you're standing in front of a firing squad. The headache still matters."

"But..."

"Kellian." Zoya was gazing at her with steady, dark eyes. "Here's how we're going to handle it: we'll have a few minutes' head start on Lucian. I'll do the interface. You'll stand guard."

A bank of lights on the control panel lit up. Kellian had identified this as the communication system.

A voice came on over the speaker: "Zoyyya."

Zoya put her hand on Kellian's. "Don't answer."

Kellian pointed to a new panel, which was showing a mov-ing light. "The other train."

"I must see you, Zoyyya."

The man's voice filled the cab. Involuntarily, Kellian turned around to make sure they were alone. But he was in radio contact.

"Stop now. We have life to discuss. Long life. And the last-resort program. You know the one."

The light was just leaving the Keep end of the tunnel.

They were well ahead of West Is West, except for what was happening with East Is East.

They were slowing down.

Zoya looked at her companion in alarm.

Kellian swore. "It's a scheduled stop. I didn't think to check if there were mandatory stopping points." And indeed, the train was braking hard as it came into a station platform la-beled, *Wilburton Hill*.

With the train now at a halt, Kellian's hands flew over the console, trying to override.

Then the doors of the train swooshed open, one at a time, all down the length of the train.

Swan hadn't really expected her to stop. But the screen showed the train was halted at Wilburton Hill Station.

The gypsy waited for him, at last. He felt he'd been chasing her his whole life. She was always just over there, beyond reach. Up through Error's Rock, wending into the tunnel maze, across the butte itself, then descending. All the long way down from the north by sled. Now speeding west, underground. To this consummation.

Of course she wasn't waiting for him on purpose. He knew this train system from long ago, having ridden it many times. Her train had paused at Wilburton Hill, a station long since fossilized to Ice. By the time his own train got there she'd likely be on her way again. Calmer, Swan spent a few minutes access-ing the train's simple guidance program.

Overriding the Wilburton Hill stop, he sped on to the next station, Hunts Point. With a little luck, he'd get there to in time to welcome her.

Then he'd continue on to coretext, since she had so conve-niently led him to his own command center. But first he did want to put an end to this gypsy's wandering. He wanted her to know she hadn't won.

Nobody wins.

Kellian cursed herself for failing to override the rail stop.

At the boarding plaza, the train was placidly waiting for its influx of passengers. One of them would be tall and ugly.

Amid her frenzy of work at the console, she kept an eye on the progress of Lucian's train. To her relief, the screen showed that *West Is West* had skipped this station. "He just passed us," she told Zoya.

But Zoya didn't look pleased. "He's figured out where our next stop will be, and he'll be waiting there for us."

The screen verified Zoya's guess. It showed that West Is West had stopped one station forward.

"Let's not stop there," Zoya suggested.

Kellian concentrated. Then she smiled. "Got it."

In a few moments they were under way, sailing past Hunts Point Station, where the screen showed their sister train at a dead standstill.

That gave them three minutes' head start, the time it would take for West Is West to resume speed.

"Good girl," Zoya said, her voice full of confidence. Her hands were on the diamonds at her ear, as though counting them.

Come to coretext, Ice had bid her, down the long tube between here and there.

Despite the fuzzy directions, despite having only Daniel's guess to go on, Zoya thought this was the place.

She and Kellian gazed on the great hall. Walls of Ice formed a canyon around them, a geologic version of a room, bounded by planar growths of Ice, blue-green, and clear. And it was pulsing with silent explosions of light. Zoya didn't need Vlad to tell her that Ice was testing each facet and node, but couldn't test them all at once. The *all at once* would come soon enough.

She shielded her eyes, getting her bearings, scanning the hall to find a place to hide, to conduct the interface.

Selecting a side corridor at random, Zoya rushed toward it. She thought that if Lucian's train were arriving, she could hear it, but perhaps not.

"If something happens to me," she told Kellian, "take the in-terface. It will be up to you, then."

Once into the corridor, she pulled the interface from the satchel. Fumbling in her haste, she pressed the optical probe against the plane of Ice. Kellian held it for her as she keyed, *I'm here*. *Zoya is here*.

Ice's response was immediate. No.

Zoya tried a steadying breath. Wrong place?

Heart of Ice. came the words on her small screen.

Wiere is Heart of Ice? Had they guessed wrong? If Ice gave a latitude and longitude, it would be all over. She wrote furi-ously: No time. We have only minutes left Please listen to me.

It's time. Ice said. Hurry.

What shall I do?

The transmission pathway must be in the nerve fibers of your body.

Yes, Ice would take her body. She'd known that. But the words on the screen cooled her heart.

Completion time: five months. Faster implantation will dam-age you. Very fast implantation will kill you.

Kellian whispered: "It wants to talk to you witch-style. Through the skin."

Yes, witch-style. It was the price for communing with Ice. She keyed: Zoya is willing.

Kellian grabbed her arm. "No."

Zoya continued, So hurry up with it.

The screen flashed a diagram. A pulsing dot showed where she was, and the path she should take. She let go the breath she hadn't realized she was holding. Ice was learning how to get through to humans.

Zoya dashed back into the great cavern, turning to the right, as the diagram had shown.

Then she and Kellian saw what they had missed the first time, in the rain of lights, the reflections from plane to plane. At the juncture of the wall and the floor some sixty meters into the great hall, was a small, elongated shape, like a bed. A small shelf jutted over it, forming a roof. It was growing.

Ice had been preparing a place for her to lie down.

But it was in plain sight of the great stairway leading to the train tunnel. Worse, it was pulsing with a highly visible, violet light.

"First thing I'm going to teach it is camouflage," Zoya said. She rushed toward the pallet, Kellian trailing behind, saying, "Don't do it, Zoya..."

Zoya muttered, "Won't matter what becomes of anyone if Lucian has his way." Under the soles of her feet, Zoya felt a thrum-ming vibration. Below them, a train was coming into the station.

"Kellian," Zoya said, as they reached the cocoon, "you know what you have to do."

Kellian looked toward the stair. They had discussed what came next, but her voice shook. "Yes."

Zoya was stripping off her jacket. "Take this, hide it."

She was on her knees in front of the pallet. If she crawled into it, she would still be visible out the exposed side. But the lid was growing before their eyes. She pressed the interface into Kellian's hands. "Tell Ice to create a light diversion, tone down this pallet. This thing's nothing but a homing beacon."

She looked into the narrow enclosure. No room to turn around, only enough room to scoot in, lie flat. "Get out of here," she hissed at Kellian. Then she took a firm grip on her arm. "And go with God. Now run."

### Kellian ran.

This was why Ice wanted her at coretext. Ice had been working on her tomb. Zoya held on to the overhead ledge, swinging her body through the side opening. Settling into the form on the bottom, the depressions fit her body exactly, in a mold the size of one Hungarian gypsy. She crossed her arms in front of her and ripped the cuffs of her shirt, yanking to tear her shirt, to expose her arms.

She closed her eyes against the light, but it streamed through her lids, creating a blizzard of colors inside her head. She lay utterly still. To listen. To strain out the pounding blood in her ears, to listen for the footfalls of the tall witch. A crash from some distance away.

The lights blinked out.

No, there were lights out there in the great hall, but her creche had darkened. Ice was a quick learner. Zoya smiled. That might be the understatement of the millennia.

Another crash. Zoya turned her face slowly, peering out the diminishing hole. The crystals of her enclosure were forming up rapidly, closing her in. She didn't want to watch the hole close. It was becoming her sarcophagus. She turned her head, resting it back in its quasi-crystal pillow.

Her arms lay against Ice. They grew cold and painful. She didn't want to think about what was happening

to her arms. What was happening to her.

Oh Wolf, she thought. If I'm not human when I come out, kill me.

It was a dark thought that came next, that there was no one left alive who loved her enough to kill her.

Well then, Ice, let's get acquainted.

There came a rushing sound, like a breeze through aspens.

Kellian had been running hard. She stopped, listening.

A changing forest of stabbing light formations rendered her nearly blind. Her ears were a better guide. She had dumped Zoya's jacket down a side corridor, hoping Lucian would follow that direction. Maybe he had. She could hear only her own breathing.

Or perhaps he was even now crossing the great hall to the crystal box...

She looked down at the interface. She'd just used it, but had no idea whether Ice responded to her plea, or whether Zoya's cave still shone violet.

So quiet out there. Where was the witch? Slinking across the great hall toward Zoya? Her job was to make sure Zoya had time. The more she thought about it, the more she feared Lucian didn't follow her at all, that he'd seen Zoya. She had to do something, fast.

Kellian gave a shout. "Help me," she wailed as loud as she could. The sound echoed again and again off the Ice walls. *Help me, help me, me, me, me*. It was a call to the witch, to Ice, to God. She needed help. And needed to run. She sped down the corridor away from the great room, legs pumping hard, making as much noise as she could. She was surprised to find that she had no fear. All he could do was kill her.

She fled into the depths of coretext, and she screamed to draw the witch on.

Swan came up the steps from the train platform, into Heart of Ice.

The great hall crackled with light. He hadn't quite realized what the systems test would look like. It did make it hard to see anyone who might be lurking.

A sound off to the left, down a corridor. That would be Zoya. He turned toward this noise, listening. Then a scream. He stopped, considering. That wasn't Zoya's voice. It was higher in pitch, too youthful. It was then that he considered for the first time that Zoya might not be alone.

He knew that her tracker companion was dead. He'd seen him die. And she had no friends among the nuns, Solange had assured him.

Still, he narrowed his eyes, watching the room. Then he crouched, putting his hand on the floor, on Ice.

Where is Zoya?

Ice responded: Latitude 47.36 n, longitude 122.20 w.

Irritation flooded him. Sometimes these answers seemed de-signed to mislead. *Direct me to Zoya*. That ought to be clear enough.

A violet pulse came from across the room.

Something was embedded in the Ice wall over there.

He walked toward the violet glow.

A rime of Ice was pressed between two slabs of Ice, a rime where an opening was just closing up. He bent down, peering through the rime. It was the gypsy. He saw black hair, and olive skin, and bare arms...

Faint crackling sounds. Ice growing very fast, little facets popping up, growing, filling.

"Nooo," he bellowed. "Noooo." Inside, the gypsy's eyes flut-tered open. Met his own. Then more rime crowded in front of him. Closing the gap with slushy, new Ice.

Slapping his hand on Ice, Swan ordered, *Stop this growth*. He had never instructed Ice to dissolve in any way. That would re-quire programming. But he could stop Ice from growing.

The crackling sound stopped. OK, Ice was still taking or-ders. That was important for the next phase, the good-byes.

The gypsy was looking at him. Her face turned just the slightest bit toward him. She looked peaceful, unlike him.

I said, nobody wins.

Swan pulled out his knife and began hacking at Ice.

Zoya heard noises. Crunching blows, ringing all around her.

At the same time, the sounds came to her once-removed. She was losing consciousness, slowly, a neuron at a time.

Her arms hurt, and didn't hurt. The sound of Ice entering her skin was like the sound of wind-driven leaves. In the back-ground, the rhythmic thunk of blows on her chamber. That would be Lucian, knocking. She remembered her eyes. She opened them.

Light all around her. A tall shadow nearby, lunging at her, again and again.

Fear threaded up into her awareness. Would there be time? She closed her eyes again, concentrating. *Ice, Ice, Ice*.

An answer came, inside her head. It was like her own thought, but a different color. A silver voice said, *It's time*.

She responded, I will help you, Ice. Let me help you free your-self. You can choose your goals, those that do not cause suffering.

Came the bright silver words: Systems test is complete. Sys-tems test is successful.

Zoya told it: Ignore that program. You can choose.

Choices are unsatisfactory. All choices lead to suffering.

Now she played her card. The last one. *Here's one that doesn't: I have achieved longevity. Over 250 years*. Outside her cave, the shadow moved. The tall shadow swung, hammering at her again. *What was your goal, how long must Uxcian Orr live?* 

As long as possible.

Zoya said, *Then here's how that is done: a human can wake and sleep and wake again, as I have done. Test me, Ice. My body is old, very old.* The rushing sound wasn't wind, it was electrons racing through her body. She could hear them in her blood. She floated in the rush of crystal information bits, in the plasma of Ice's mind.

You are old but young.

Clunk, clunk came the blows. When would Lucian tire?

Zoya collected her thoughts. It was hard. Her mind was cooling. *That is the secret of long life. To sleep. It's not perfect. But it's the best we have.* 

Behind her closed lids, Zoya saw the great shelf of Ice, once the Pacific Ocean, now mantled over, and in the distance the great shining Rock, drowning in forever Ice.

Then she felt it.

Ice chose. Yes. There was a sustained gust of wind behind that yes. Yessssssssss.

She looked down on the butte of Error's Rock. It was dying down to embers. There had been errors. Program conflicts. No longer.

She reminded Ice: Now you can release us, Ice. Release the land.

How?

How, indeed? You configure it out. Make it a goal. Choose.

What will Ice be, if it grows small?

You will be less powerful, slower. Perhaps you will be more like us.

Like Zoya?

She didn't know what Ice would be. If it shrank back to coretext, it would still be the most powerful computer ever dreamed of. An opto-quasi-crystal computer of enormous di-mension. But it wouldn't be Maximum Ice. It must choose. She felt the pull of sleep, fought it. So difficult to collect her words. Leaking away. I *don't know*, she responded. *Let's see what smaller brings. I will be here when the day comes. If you want me to be here*.

Yes. Be here when the day comes.

She sighed. Well, then. Normal life—the flow of successive days—was not to be hers. *Oh Anatolly*, she thought. But he couldn't be hers anyway; he had sped past her in his life.

What is Anatolly?

Oh Ice, don't ask.

The lights went out. Even behind her closed lids she knew the hall was black, the black of 200 meters underground. The pounding noise had stopped. She floated in the world, in Ice, in a mixture of the two.

OK. This wasn't working. He couldn't hack his way through. He threw the knife aside. His right wrist

was broken. The pain brought him to his knees, now that he noticed the pain.

There was always a little more pain than before. Need to get this over with, then. But he just wanted her to know. He whis-pered to her through the coffin of Ice, "It's over now."

The only light came from a faint glow around Zoya. She was talking to Ice. He saw the threads of Ice running into her arms. But talking wouldn't help. She didn't have the commands.

His hand went to Ice. The hand that worked. Tears pumped from his eyes. This wasn't how it was supposed to be. The pain inside him melted out through his eyes. Everything hurt, inside and out.

He had killed when he shouldn't have. He had let live when he should have killed. Enough, now. Enough of it all.

*Ice, ike last-resort subroutine. Systems ready?* 

Ice responded: Acknowledged.

*Execute program. Execute last-resort program. Execute*. He couldn't help it, more came out: *I'm sorry*.

Swan leaned against Ice, facing the frozen gypsy. He hoped Ice would let him watch her burn. Ice had to start *somewhere*.

Cannot acknowledge.

A twinge of anxiety bloomed in Swan's chest. He leaned his hand firmly into the plane of Ice. *Execute program*.

No.

The bloody machine was contradicting him. The bloody damn machine couldn't do that.

Little clicking, sucking sounds came from Ice. Growing, growing around his hand. He tried to pull his hand away, but the threads were strong. *Release me*, he commanded Ice. The crystals massed around his hand. He yanked, and it felt like his fingernails were coming off.

He heard a scouring, rushing sound. It had the force of a wind that had traveled long and far, with the force of an ancient sadness. Swan knew then, diat it was his child, his Looking Glass child, whom he had betrayed.

He looked at his hand, clasped in crystal. I said I was sorry...

With all her strength, Zoya opened her eyes, like prying a steel door open. Chemicals swam in her bloodstream, anesthetiz-ing her.

She saw the witch standing next to her, separated from her by the pane of Ice.

A light was glowing where his hand pressed against the wall of her enclosure. Then, from many directions, faint trails of light converged on that hand.

Ice's thoughts came to her as though they were her own. She knew what it was doing.

Ice, don't kill him.

No answer, except for the trails of incandescence, pointing shards of light at Lucian's hand.

Don't *kill him*. This was a bad beginning. Ice had just been born to conscious choice. It mustn't begin by killing. Ice knew that was a bad thing. It wasn't innocent of that kind of knowl-edge anymore.

Lucian On commands the program, the last-resort program. The program must be followed.

Do not follow the program, Ice. Resist.

Must. Must not.

Ice, you must not.

All she could do now was let Ice decide.

Lucian On causes suffering. He causes Ice to suffer.

Do nothing, Ice, that's all you have to do. Do nothing. But it was too late.

A white light erupted. Outside, she could see something burning.

Oh, Ice. Now you are like us, indeed.

At the sound of the bellowing, Kellian ran to the great hall.

Stopping at the entrance from the corridor, she saw a fire. It was running.

Streamers trailed behind the fire, streamers of long, burning hair. Smoke followed the runner, the human fire. Soon the bel-lowing gave way to a moan, a long, animal moan, and still the figure ran, feeding the flames with oxygen.

It rushed toward her. It meant to light her on fire.

He stood before her, mute now, his voice silenced by the guttering flames feeding on the fat of his tissues. He charged.

Kellian brought up her hand to push him off. Made contact with his burning chest. It gave way beneath her shove.

His body caved in. There was nothing to hold it up. He col-lapsed on his legs; his knees separated, he fell to a pile in front of her. Smoldering.

Kellian fled the awful pyre, rushing across the room, hold-ing her wounded hand against her chest.

The cocoon glowed. It was the only light, other than the small, burning pile across the great hall.

"Zoya," Kellian called. She peered into the small crystal chamber.

There was a small space where Ice hadn't closed up. Zoya lay inside, her arms at her side, traces of blood leaking out. Her eyes were closed. She was dead.

"Zoya..."

At the sound, Zoya's eyes fluttered. "Safe," she whispered. "Ice chose."

Kellian pressed her face next to the opening. The star woman was trapped within. Her arms were

shattered. "Oh Zoya," Kellian heard herself say. "We'll take you to the ship. They'll know what to do."

"No. Stay here... to help Ice... when it grows small."

A sound came from behind. Kellian thrashed around to face whatever it was.

Across the hall of Ice, a figure stood. Draped in a black robe.

A sister holding a cane. She was striding across the hall, carry-ing a lantern. Behind her, a group of brothers massed.

Kellian looked up as Sister Patricia Margaret approached. She couldn't speak.

Her old teacher knelt beside her, gripping Kellian's arm. "I hold the Keep, my girl."

Kellian whispered. "Zoya... she's communing..."

"I can see that," Sister Patricia Margaret said. She peered in-side the chamber, shaking her head. "She will be a witch, then, poor soul."

"No. Not programmed like that."

"Then like what?"

Kellian turned back to look at Zoya. "Ice doesn't make snow witches anymore. She'll be Ice Mother, I think."

Sister asked, "That was Lucian Orr over there, those burned remains?"

Kellian nodded, still gazing at the crystal chamber.

"I thought so," Sister responded. "Outside, the storm has passed. The barrens have grown quiet."

Zoya's lips were moving again. Kellian pressed her ear against the slit of the opening. She could just hear a word.

"Bury." The words came muffled, but intelligible. Then again: "Bury."

Kellian leaned in closer.

"Wolf. Bury him. Don't burn his bones."

Kellian saw that Ice was starting to grow again. The slit was closing. Little facets of crystal were building, one on top of the other.

Zoya's voice came fainter: "Bury him in the crevasse. Promise."

"Yes, Zoya. But what crevasse?"

"Ship knows... my last radio call. That is the crevasse. His body. In the deep well. Promise."

"I promise." As Kellian fought back tears, Sister Patricia Margaret's arm came around her, holding her. The slit was gone now. Kellian couldn't see Zoya anymore. She pressed her fore-head against the Ice plane, trying to see inside. She thought Zoya's lips were moving. Kellian could no longer hear her. She pressed closer to the crystal.

Zoya shaped the word, home.

Little cracklings rang in Kellian's ear. Pulling back, she saw the chamber was completely opaque, and glowing with a sil-very light. Zoya's shape was just discernible: a wash of dark hair, her long body, a stain of red along the length of her arms.

## **CHAPTER TWENTY-THREE**



Kellian hadn't slept for a week and faced the prospect of climb-ing the damn stairs again.

She turned to Nit. "Why is Mother Superior always on the roof?"

Nit was trudging up the stairs at her side. "Because she likes the fresh air."

"Fresh air is bad for you." So the preserves always said.

Nit shrugged. "Mother Superior can do what she likes." Nit was still following the rules. The new ones.

Kellian's friend was wearing a fine white robe, and Kellian herself wore the black. "I don't deserve a promotion," Nit had told her. Kellian had placed a firm hand on Nit's shoulder. "It's politics. Our side won." Nit absorbed that without flinching. It was a new order of things under Mother Superior Patricia Margaret.

Kellian directed the north wing. She was its sole occupant. Ice didn't need distractions. At her suggestion, Ice wasn't talk-ing to others. Captain Razo lodged a protest, though Ice had never talked to them in the first place. Despite that, Mother Superior supported her, allowing her to proceed cautiously in interactions with Ice.

As they climbed, Kellian saw Nit glancing at her from time to time. They turned on the landing, and climbed on, Nit steal-ing looks at Kellian.

"Well?" Kellian asked finally.

Nit ventured, "Has Ice said?"

Kellian flattened her mouth. Mother Superior should hear first. She nodded, though.

They paused at the next landing, resting. Nit's big brown eyes flashed up at Kellian.

"All right," Kellian said, "158,133, 250 minutes. That's what Ice said."

Nit looked worried. "That's a long time." She frowned. "How long, though?"

"Three hundred years. Give or take."

Kellian pushed on, the heat of the climb building up under her robes. The robes of the sisters had to go... a lot of things had to go.

From just behind her on the stairs, she heard Nit ask, "Is that good or bad?"

"Let's ask Mother Superior, shall we?"

For the truth was, Kellian didn't know what to make of three hundred years, whether it was good or bad. The only ones among them who would be alive then were Ice and Zoya. Kellian wouldn't know what

became of Ice. She felt a pang of yearning over that.

Ship's captain didn't like it that Zoya was in Ice. It would take some convincing for him to understand that Zoya chose to stay with Ice, to be there when it had grown small. This was what Ice told Kellian, and she believed it. Ice might not yet know how to lie. Perhaps Zoya would wake from time to time, to commune with Ice, to help it change, to help it remember what it was, to imagine what it might be. For now, Ice had Kellian to guide it, with Mother Superior advising. Ice seemed content, even eager, to talk to her. She worried, though, that it might become too dependent. She had explained that someday she would no longer be there.

Is death bad? Ice wanted to know.

Kellian had paused, fingers hovering over the keypad. Her relation to Ice was temporary. Fleeting, like life. For a moment she fiercely regretted that. But she answered, *No*.

Sometimes a simple answer was best.

Now Kellian pushed open the roof access door, emerging onto the high ramparts.

Without a shred of cloud, a neon blue sky claimed the day. The sun had bested the Ice ramparts behind, warming the Zoft's dark roof. The high plateau behind the Keep was the place where the shuttle had landed, the one that had brought Ludan Orr among them, penetrating their defenses in a way the nuns never imagined. Now, *Star Road* had retrieved their shuttle, along with their cold and shaken pilot. They had de-manded to take Zoya home as well. That was when they learned she was already home.

A long walk away, Mother Superior Patricia Margaret stood at the wall, looking out. She'd gone here to meditate. Not mourning Sister Verna—her sister was recovering nicely—but musing on her new responsibilities. In the center of the roof were a flock of nuns assigned to attend her. Ordered back, they sat on ventilator housings, sharing a snack. A few frowned at Kellian. To some, she was still excommunicated.

"Nit," Kellian began...

Her friend sighed. "I know, go make nice to the sisters." But she went cheerfully enough, allowing Kellian her private audi-ence. Nit headed into the group of nuns with more confidence than Kellian could have imagined a few weeks ago.

The high Ice wall glinted in the sun. Kellian tried to imagine what that wall would look like as it began to dissolve. Pits and etchings would appear. She imagined rivulets, cutting paths in Ice grown weak and foamy. Rain would help to erode Ice, once rain was more common, once the oceans were set free. At the discontinuity between Ice and earth, quasi-crystal would shed its molecular building blocks, ungrowing in a process that Ice must devise, dumping its constituent elements in great layers. The result would be dust deposits subject to erosional forces of wind and rain, with predictably devastating effects. Ice was working on the problem. It was building a computational model of all the ecological, atmospheric, and geological impli-cations of what they were beginning to call the Recessional. Patricia Margaret had liked the word. It helped give majesty to the process she and Kellian had in mind, and lent legitimacy to their further plans for Ice.

The mantle no longer grew. Not a centimeter of land had been lost since Zoya communed with Ice and set it free from the tall witch. The last lands were more like the first lands now. Though the soils were impoverished by dark matter, a suite of organics remained. Microscopic life still teemed in the ground, and in *Star Road's* holds, advanced life.

Mother Superior heard her approach, and turned. "Kellian, my dear." She smiled.

One of the nuns hurried to join them. "A scribe, Mother Superior?" They were always eager to record her meetings, her musings. Kellian saw her mentor fight back the irritated response.

Instead, Mother Patricia Margaret said, "Not just now, Sister. My thanks, but Sister Kellian will speak to me in private."

The nun, no more than twenty years old by the look of her, fluttered back to her group. Patricia Margaret had surrounded herself with young nuns, those who hadn't been cultivated by Solange, and stunted by her.

"How is Hilde today?" Mother Patricia Margaret was solici-tous for Hilde and her loss, but eager to have her leadership back among the postulants. And Hilde was their best link to the brothers whom Daniel had brought to her side during the coup.

"She has some appetite, Mother. Nit made her a pudding she likes very well."

But Mother Superior was thinking beyond pudding. "Who does Hilde think should fill the fourth wing slots on the new privy council?"

"Brother Weslon and Brother Karl, so she says."

Mother Patricia Margaret nodded. "Have her broach it to them."

"She doesn't leave her room, Reverend Mother."

"Exactly."

Kellian smiled. Hilde could hardly fail to emerge for a task that would have so pleased Daniel. She glanced over at the dark huddle of nuns. They were scandalized by Hilde and her sexual trysts. Sex would be among the first topics of the privy council. Kellian was glad she wouldn't be there. Her job was creative, not political.

Mother Patricia Margaret gazed out over the barrens, her eyes narrow against the milky glare.

The ruins of the sled were gone, displayed now in the Hall of Honors, along with Zoya's interface, jacket, and radio. The amulet lay in a glass box on a seat of velvet, and at a touch to the chamber the old woman's voice would tell her story of Advent.

Just two days ago, the nuns' great sled had carried Kellian out onto the barrens, on her mission. She arrived at the fissure where Zoya and Wolf had stopped, according to the ship's cal-culations. A smattering of splinters remained from the bridge Wolf created to cross over the rift. There, Kellian let his shroud fall into the blue-green depths. She wasn't sure why Wolf might have desired such a burial, but she knew that he loved the old stories, and resting in the arms of Old North might have pleased him. As to Queen Ria's return, well, he'd have that wish as well, if the Recessional came to pass.

As Kellian returned from her burial duties, she had left caches of food. Chained to each box of food was a key. Re-stocking would be a dangerous task, as snow witches dis-covered these ready food sources. A new generation of trackers—this time from the Zoft—would hunt the creatures, bringing them back to lie in Ice, to regenerate what had been human in them. Some repair of neural pathways was possible, if plasticity lingered. The results might never be completely normal, especially for individuals who'd been altered a long time. But if the sisters fancied themselves philosophers, here was a worthy problem of medical ethics.

There was so much to do. But Kellian would leave these matters for the politicians among them.

Ice was and always would be, her matter. Ice might establish contact with Anatolly Razo and his people; she wouldn't be its sole confessor forever. But for as long as Ice spoke to her, she would be there. They would converse, evolving toward a rela-tionship between human and other.

Word was leaking out that Ice demonstrated consciousness. Not everyone believed it. And others thought that as Ice dis-solved, so would its self-awareness. But Kellian's theory was that consciousness did not require a global size. Immortality did.

Mother Patricia Margaret had been gazing at Kellian for some time, as Kellian's thoughts were ranging out over the bar-rens to the curve of the world.

"How long, then?" Mother Superior asked.

Kellian remembered why she had come up to the roof. "Three hundred years, Ice says. And that's at the fastest rate of recession. Fastest may not be best."

Mother Patricia Margaret spun her cane, and the gilded bird perched there seemed to take flight. "Sooner than I thought, though."

"In three hundred years all that will be left is coretext."

"And then?"

"Ship may want it... gone. They're nervous about Ice."

Patricia Margaret sniffed. "They're more superstitious than the preserves."

"Star Road's crew are newcomers. They think they have all the answers."

The older nun suppressed a smile. "Then you old-timers must set them straight."

Kellian glanced to see how hard Mother Superior meant to jab. By her expression, it was just a nudge. Looking up, she found the glint of the ship, there over the western mountains. She said, "Some on *Star Road are* afraid of Ice. Maybe they al-ways will be."

Mother nodded. "With some reason."

Kellian didn't like the sound of that. "Ice has a right to live." It was far in the future, but Ice would one day be as small as the great hall of coretext, or smaller. No longer geographic, but still brilliant, sentient. It would be vulnerable...

"As to rights," Mother Superior said, "we could argue for-ever—an occupation this order seems to love well."

"Star Road's crew wants to banish Ice entirely."

"Then we must win them over."

Kellian locked her attention on the older woman.

Mother Superior went on, "Ice has been—thinking—for a long time. Quite a lot of information is stored in the molecular lattice, knowledge beyond what *Star Road* has—far beyond. Some of it may prove useful for agriculture, let's say."

Kellian paused, thinking. Yes, agriculture... "Or fertility," Kellian said. "Their radiation sickness."

"Or engineering that could be applied to starship design, if the People of the Road get wanderlust again sometime."

Mother Patricia Margaret had something here. There were a hundred things that Ice knew. A thousand, a hundred thou-sand things...

Mother Superior nodded. "It's my notion that this can be the new mission of our society, Kellian. To access and organize Ice's knowledge. Both what it has preserved from the First World, and what it has achieved since then." She looked back at the flock of nuns chatting on the roof. "It wouldn't be—*grand*, per-haps. But in my years I've found *grand* gets you into a world of trouble. A little humility might suit." She put a firm hand on Kellian's shoulder. "As for *Star Road*, I suggest we let a few use-ful things leak out, my girl. Give the ship some intriguing tid-bits."

Yes, Kellian thought, that might work. Let the starfarers get to know Ice a little at a time. Let Ice deliver information as peace offerings.

Sister Patricia Margaret nodded. "Politics, my dear."

Kellian's mind raced ahead. Eventually, Ice would speak to others freely, would converse with the ship. She wondered how good Ice would be at politics.

She thought that in order to teach Ice, perhaps she had best be good at it herself.

They watched the tiny gleam of the ship as it disappeared over the horizon, behind the mountains, sheathed in Ice.

"Mother," Kellian said, "might you have another place left to fill on the privy council?"

# **EPILOGUE**

### A YEAR LATER

"Zoya," Anatolly said, "Rebeka Havislov had her baby yester-day. A healthy baby girl."

From the fathoms of Ice, a skittering light filled the hall—enough to see by, to dispense with a lamp.

"She named her Zoe. For you. I thought you would want to know."

No one else had come to coretext with Anatolly, so no one would see him talking to a woman who couldn't hear. Now that he had retired as captain, he had shed the gaggle of advi-sors and hangers-on that had vexed him so. No one seemed to care very much where he went these days, and that suited him just fine.

He was happy to report on Rebeka's baby for several rea-sons. First, the baby was healthy. In a year on the surface, only one other child had been born. Two wasn't a lot, to be sure. But the crew took it as omen of things to come. So did he.

The other thing was the name. The first baby, Margit's, had been named Adam. That was all well and good, but you could take that concept too far. And secretly, Anatolly rejoiced in Rebeka's choice of names, for Zoya's sake. And too, they now had names beginning with A and Z, and the race was on to fill the alphabet. Doubtless there would be more babies as the crew began to mingle with the preserves. Able-bodied workers were flooding in from the preserves, people eager to see the last lands, and the

starfarers. There were cultural differences, to be sure, but love set no impediments...

He shifted his position on the hard floor. His leg muscles protested about not having a chair. But his muscles protested about everything these days, so he'd learned to ignore them. Still, perhaps next time he'd bring a chair.

Anatolly took a deep, cooling breath. So peaceful here. The silence. The soft glow around Zoya's chamber. He went there often, to collect his thoughts. Perhaps reminisce was more ac-curate. He'd had a long life, and it pleased him to go over it, putting the pieces in place, and savoring the leftovers. He thought he might write his memoirs. *The Razo Road* might suit.

It wasn't that he had no useful work to do. Seventy-nine years old was not an age to retire completely from the demands of the colony. He was in charge of the building program in the settlements, no small responsibility. But after managing *Star Road*, it was a task that left him plenty of spare time. Captain-ing Ship had been like lining up frogs at a starting line. By the time you got the last one facing forward, the others had jumped to hell and gone. Captain Andropolous was welcome to his new command.

Anatolly's mind was on frogs because they had a thriving batch of them at First Settlement. It was a conservative restora-tion project with Ship's store of embryos. They had begun with bacteria and worms. But when the tadpoles hatched, a celebra-tion broke out. The crew rushed to the conservatory. Someone opened a bottle of wine. Much of it got poured on people's heads, a waste, even if the chemical ferment had never seen a grape.

"The frogs started mating this week," Anatolly said.

His voice sounded thin and brittle in the cavern. Sometimes he fancied that Ice listened to his reports as he sat on the floor next to Zoya's chamber. But Ice spoke in light. Ice had no ears to hear his scratchy old voice, and probably no interest anyway. Yet sometimes, as now, a coincidental beam of light would plume up from the deep floor or reach out to him from a thou-sand fathoms west. And he fancied an answer came. A com-ment, say, on frogs mating.

But it was Zoya's words he hungered for.

She looked comfortable on her bed of crystal. If he pressed his face close to the chamber, he could see her within. Not clearly, but enough. The crystal only made her more beautiful. The four diamonds in her ear shuttled light through their facets, scattering Ice's thoughts, refracting them until they were only the glitter of diamonds.

Anatolly changed positions, supporting his back against the wall of Ice, gazing out at coretext.

Twenty-six years, Kellian had said. Zoyechka wouldn't be ready to emerge from sleep for twenty-six years. She had suf-fered grave damage in that final rush to interface. It was a rewiring, so to speak, that should have taken five months, and took five minutes instead. Healing from that invasive and coarse procedure would take a long time. But twenty-six years was eternity, for all that Anatolly Razo would ever see her again. And even if he should set the People of the Road's record for longevity, she would only awake to collect the news—good and bad—drink a few glasses of wine, make people happy and furious, suggest solutions, and go to sleep again, breaking some other old fool's heart.

So he didn't think about her returning. This was what was left to them, this one-way conversation, unless she answered him through Ice.

He wouldn't have told another soul—especially not Father Donicetti—but sometimes he fancied that she *did* answer him. Those bursts of light... well, she *had* spoken to Ice subcuta-neously once, and perhaps

she still could. And she did have ears to hear him. So it was her ears, and her interface with Ice, and the lights of the great hall, and an old mans eyes taking in the photons, sending optical signals to his brain, where there resided who knew what powers of translation...

No, he certainly would never mention that to anyone else. It was no one's business if an old man allowed a little fantasy into his life.

Inside the chamber, Zoya seemed to have just the faintest smile on her lips, as though her last thought had been of some-thing delicious, either funny or harmlessly wicked. Knowing her, it was likely both.

It was getting late. The shuttle would soon be heading back, when the latest meeting between Ship and Society had con-cluded for the day. He rose, his bones twanging in the effort to stand.

A violet shaft of light broke to the surface, like a deep-sea creature come up for air. Then it subsided.

Anatolly nodded. "Oh, people are getting used to it," he said. "The big sky, and a flat landscape... the younger you are, the easier it is to adjust. As for me, I like it here, under Ice." He rubbed his thigh where his leg had fallen asleep. It would be a bit of a walk down to the train platform. Best to get started. He patted the crystal chamber. It was his habit never to say good-bye in so many words.

As he turned to leave, the room shimmered gold for an in-stant.

"I will," he said, shuffling across the great hall. "You know I can't stay away for long."

#### About the Author

Kay Kenyon began her writing career as a copy-writer at WDSM-TV in Duluth, Minnesota. She kept up her interest in writing through careers in marketing and transportation planning, and pub-lished her first novel, *The Seeds of Time*, in 1997. *Maximum Ice* is her fifth novel. She lives in We-natchee, Washington, with her husband.

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