

# THE SPEED OF BELIEF

Robert Reed

**My stories often wear preliminary titles. “The Speed of Belief” was originally called “Paranoid River.” It was conceived from the image of a conscious body of water flowing downhill toward its enemies. This might or might not hold true in the final story. I don’t want to surrender any details. But there are plenty of good reasons for paranoia, regardless what world you happen to be crossing today.**

## 1

Water dreamed of flowing downhill, and despite their bluster and brains, humans were nothing but fancy water.

That robust, endlessly useful lesson came early. Rococo was growing up on a colony world undergoing the final stages of terraforming. Man-brewed storms were transforming the barren highlands, and knowing where the new rivers would rise, the boy would find high ridges where he could watch the churning, muck-infused flows. Majestic violence was a reliable pleasure, and he adored the painful rich stink of alien rock being torn apart. But most of all, Rococo loved his own wild panic, and standing where everybody could see him, he couldn’t help but dance along with the trembling world.

Strangers warned the boy to be smart and step back. Friends knew that he was quite smart, and so they begged him to be more careful, please. But Rococo’s parents didn’t trust his brains or his common sense, and that’s why they simply banned their son from wandering the wastelands alone. But of course rules were nothing but treaties, and every treaty was just words wrapped around flaws. A charming lad could always convince some old fool to go with him, and then through one clever trick or another, he would slip away to do just what he wanted.

Then one day a mountainside collapsed. Rococo was prancing joyously, and then with no warning, rock and flood swallowed him. Rancid salty mud killed the body in every little way. Oxygen metabolisms shut down. His bioceramic brain retreated inside itself. Limbs were torn off, his chest was gored, and the shattered head was finally buried under a young river delta. Blind and helpless, that remarkable mind had little choice but to consider its own nature. And that’s when Rococo began to appreciate how he was being carried through life by some very simple urges. Curiosity, for instance. That was a drug forcing him to find out what would happen next. He also had

an instinctive love for mayhem, his senses coming alive only when the world turned wild. And there was always satisfaction in doing what nobody else would try, which was evidence that smug pride was the most useless, marvelous force in the Universe.

Modern humans had engineered minds wrapped inside ageless, nearly immortal flesh. But their flesh was still mostly water. Water was a sanctuary for the ancient emotions. Love and lust, status and revenge. Those were the simple dictates in every person's actions. Furthermore, emotion had a pathological need to string the Universe into a personal narrative. Every person lived within a story. That tale was adaptable and selfish, and it worked best if it served the soul's needs. No matter how small, every journey demanded purpose. Just rising from the chair and crossing the room involved planning and a successful arrival. But where the average person was happy with small successes, Rococo wanted more. That's what he decided sixty thousand years ago. Robots and family dogs were yanking his corpse out of the river mud, and his parents were weeping over and screaming at the mummified face, and AI doctors preparing to heal him completely. But the boy inside witnessed none of that drama. He was a calm soul reveling in his mighty ambitions, an epiphany born inside a temporary grave. And now he understood that he would risk anything for just the thin chance of being part of history.

\* \* \*

"People don't dream," Rococo began, as a joke and not as a joke. He felt as if he believed every word, declaring, "It's our water that dreams, and that's what makes us simple. Solvents are uncomplicated and transparent. Water or liquid methane, sulfuric acid or supercritical carbon dioxide. Every species is compelled by the fantasies of its broth."

Pausing, he tried to gauge his audience's reaction.

Silent indifference held sway.

"And nobody is better suited than me when it comes to deciphering what an organism believes," he continued. "Knowing the beast across the table: That's what makes the premier diplomat. Which isn't my only skill, no. But it's a talent, and I'm not an animal that keeps quiet about his talents. Particularly when I'm walking beside the Ship's most famous exobiologist."

These were old boasts, but Rococo had never made them sound so ludicrously grand. He wanted to push the issue this morning. Eight days after their vault landed in the high country, and seven days into a desperate march across this lovely, half-dead wilderness, he was hungry for energy. Rococo wanted to kindle scorn or mocking laughter and maybe an exchange of insults. Big emotions would give everyone enough fire to keep them distracted. The question was: How would Mere react to his inspired nonsense about dreams?

Two more steps, and then the tiny woman stopped walking. Staring at the horizon, not at him, she said nothing. A native bug landed on her head and then flew away again, and she said nothing. They had a destination and a timetable, but it was more important to make everyone wait. Then, as if addressing the horizon, she said, "Water doesn't dream, and only an idiot would think so."

Diplomats could smile on command—either a human grin or some disarming, alien-inspired expression. But Rococo never lost sight of ultimate destinations. Whatever happened, he wanted to become Mere's lover, and at this point in the negotiations, smiles would diminish his odds. Frictions were essential, and that's why he bristled. "Don't try to insult me," he warned. "I've destroyed worlds because someone insulted me."

Not true, although he had seen a few worlds die.

Mere finally looked at him. "Have I ever told you?" she asked. "You're a silly, pretentious man, and you have no deep understanding of any creature besides your ridiculous, self-important self."

A good swing. He granted her that much.

“But simple ideas are pushing us,” he maintained. “They shove us across worlds and through the aeons. You’ve seen it, Mere. More than anyone, you’ve experienced what ideas do to the tiny soul. Yet you still won’t concede the truth. That I know something useful. Because you’re stale and stubborn and full of pride. The ancient, wondrous Mere.”

The woman’s gaze returned to the horizon. Rugged, ice-clad mountains rose into the dusty sky. A valley was resting at the mountains’ feet, and all of that ground should have been the darkest blue-black. But the valley was mostly gray, the air stinking of cinders more than life, and knowing the tragic reasons why, a weaker soul might have sat down and quit.

But there weren’t any weaklings in this group.

Mere had a starved slip of a body that never grew tired, and she had big lovely eyes that looked human and looked alien, managing the trick inside the same glance. The ageless lady had endured the most spectacular life: Raised by extinct, deeply peculiar aliens, she carried a unique outlook toward the Universe. And later, having survived the long, unlikely voyage to the Great Ship, she became the captains’ favorite instrument to investigate the most alien worlds.

Rococo also had considerable experience with every sort of creatures. He was the Ship’s first diplomat, after all. And like a lot of observers, he held the opinion that despite being human, Mere was a species of One.

They didn’t have time to stand, yet the woman stood. For another precious minute, nobody moved. Then Mere finally turned, looking at Rococo when she said, “Water doesn’t dream, you idiot. It’s the salt.”

“The salt?”

“Water’s the container. Ions passing across borders. That’s where our simple lives come from. We’re walking, talking salt.”

Ah. She was teasing him.

Rococo’s laugh was honest, but he cut it short for effect.

Then the captivating woman turned to the third person in their ranks. “Amund, what do you think? Is it water that dreams, or is it salt?”

Amund wasn’t immortal. A luddy by birth and by outlook, he rarely showed any patience for these long debates.

Until now.

The man turned serious. Hands opened and then closed, forming fists. The aging face turned harsh, but the eyes were soft. “You’ve got your shit backward,” the luddy stated. “There’s just one dream. Water and salt, people and rivers. And all of us obey the dream.”

There was no bioceramic brain inside him, just water and salt, and Amund had come here for one exceptionally awful reason. Except the reason had gone missing, and regardless of what happened to his ancient companions, he was certain to die without fulfilling his purpose.

Three people traveling across a half-dead world.

How could anything so simple become so complicated?

\* \* \*

Wildfires had remade the land. Combustive wildfires, not nuclear blasts. At least not here. But the dense native air was heavily oxygenated, and the bedrock had been scorched clean of its forests and soil. Which made the walking easier, yes. Just another two days, plus the usual delays for Amund’s fatigue, and they finally reached the valley and the river. Only it wasn’t the river they would have hoped for. Spring water and melted snow fell into a body that made no noise beyond bubbles chewing at pitched rock. The waterscape was thinly populated, every swimming creature

ready to eat its neighbors. But of course the water knew how to move, and that was another stroke of luck.

To return home, Rococo needed to reach this river's end. He dropped the pack that was carrying their survival kit, and wading in up to his waist, he pulled off his shirt and extended the sleeves, setting the garment on its back.

"Do us the favor, friend," he said. "Learn to float."

Living clothes were popular with a few sentients—commensal skins and engineered organics, plus slaves worn for one brutal tradition or another. This shirt wasn't alive, but the fabric carried a tiny mind and many useful talents, including a genius for rebuilding itself into useful and unuseful forms. Gathering dissolved minerals and little breaths of air, the garment expanded and inflated itself, and the man stood over it, offering suggestions and then his approving silence.

Rococo's home world was massive and bathed in UV light, and that environment had dictated his carefully tailored frame: The long body and short powerful limbs, plus a chest harkening back to an age when power was carried as muscle and big ribs wrapped around the mortal heart. Projecting a sense of youth, his bare skin was brilliantly black in the day's glare. That handsome face never needed adjustment, an elegant ooid wrapped around widely spaced, deeply purple eyes. His teeth were gold and the gray hair never grew past the point where the nubs were barely felt, and he had a smart voice that could shout until the sky rang, or the voice might say very little and say it softly and everybody heard the words just the same.

Mere wasn't even a third his size, yet she enjoyed her own power. The black hair was thick and grown long, and her body was as tough as hyperfiber, or at least seemed to be. This woman had outlived her homeworld, and serving the Great Ship, she had traveled alone to the most bizarre realms, risking her life many times. It was easy to believe that no other human, alive or lost to history, was as wondrously peculiar as her, or a tenth as lucky, or a millionth as blessed.

Mere knelt where the river was swiftest, toes to the water, her hands coaxing her shirt to change its form.

Rococo had no choice. Her breasts wanted to be seen, and he watched them until he could feel them under his hands. His imagination did the caressing, and enjoying this one immortal pleasure, he smiled.

Then he noticed the luddy staring at her too.

Funny. A man could admire any lady, knowing that he might never touch her. And despite pride and his own high opinions of himself, that same man could accept celibacy all the way home to the Great Ship.

But this was too much of a stare. Amund wasn't just giving a polite, appreciative glance. No, the mortal was very serious about his lust. A butcher carving his way to the bone. That's what he looked like. Not a vicious stare, or cold, but definitely immune to humor or other distractions. To Amund, nothing in the Universe mattered as much as a creature older than hundreds of generations of luddies.

"Amund," said Rococo.

Nothing changed. The voice that couldn't be ignored was being ignored.

Again, louder this time, the diplomat said, "Amund."

A name old beyond old.

The thin, sunburnt face turned slowly, grudgingly looking at his competitor's face. A brain with more water than thought needed time to frame its response. Giving him no time, Rococo said, "Just as we planned. Wet your shirt and we start floating downstream before sunset."

Saying nothing, Amund kicked off a pair of freshly grown boots and stepped past the bare-chested Mere, clambering down a steeply cut bank, frigid water quickly to his chest, to his chin. Then a pained voice yelled, "Hey, shirt."

He said, "Make me a boat or drown me. You decide which."

\* \* \*

2

Amund was little more than a boy when the captain came to his home. But that boy had a finished body, and being healthy as well as crafty-smart, he had several young women already helping plan out his promising life.

His future seemed to be locked inside one kind of wonderful, and Amund thought that he understood what his story would be. But then Washen strode into the Highland of Little Sins. That was a remarkable occasion on its own merit. Captains never visited the sanctuary, certainly not a captain as powerful and famous as this entity. Knowing voices claimed that she was one of the Master Captain's favorites, and Washen brought a famous history as well as that very famous face. Amund knew the face well enough to recognize it from the high ledge. That's where the children were told to gather while the important adults stood below, forming a neat half-circle around an immortal machine carrying a lady's face and a god's invincible powers.

Every Highland citizen was human. That was the law. Humans were archaic animals, noble and true, while every captain was a contraption full of mechanical parts and magic. And without question, Washen was a striking machine. Tall and graceful as a willow, not only did she look more human than Amund would have guessed, but nothing about her voice or manners seemed artificial. The local hour was twilight. With darkness spreading, the visitor bent low before the important residents. She had mastered their local language, presumably for this single occasion. With passion, Washen spoke about the honor of breathing holy air and apologized for the pollution that she had brought to them. But important matters had been pressed into her hands. She warned her audience that duty sometimes gave her little time to act. And while she was asking for an enormous favor, the captain promised to deliver ample compensation as well as the hope that this insult, horrible as it was, could be forgotten by future generations.

Amund didn't want to be impressed, but he was. This captain had mastered certain customs, and how many minutes did that take her?

"But she's not a 'her,'" he muttered under his breath.

"What's that?"

"What you see down there," he said. "That's nothing but machines wrapped inside machines."

Where stone turned to air, he was lying on his stomach, his favorite girl beside him. She was a beauty by every measure, though less creative than some. Perhaps a little simple, and very definitely conservative. Yet Amund's lover was charmed by that woman-faced creation, and that's probably why she didn't appreciate his tone, slipping out of his grasp and then crawling out of his reach.

Abandoned, Amund had little choice but to watch the drama below.

"This beautiful realm is your home, and your home lives inside my ship, and the Great Ship lives within the Galaxy," Washen said. "As I stand here, one distant world is actively begging. It wants permission from the Master Captain to come onboard. Which is wonderful news. Captains are sworn to many jobs. But after we ensure the safety of our passengers and the safety of this vessel, our primary task is to welcome every guest that we can carry. For a reasonable fee, we make them comfortable, and we allow them to build homes among us, and we promise to carry them safely through this glorious wheel of stars."

The Highland was a cavern furnished with jungles and jungle birds and artful

crisscrossing waterfalls. It was also rich with blindfolds and stubborn indifference to everything beyond these wet green walls. Amund's neighbors looked as if they absorbed the machine's prattle without complaint. Didn't they understand? Washen was stripping the situation down to its simplest, most appealing core. Amund saw the trick. This was what he would do, if his chore was to explain stars to idiots or language to dogs. And that's why he was offended. Dressed in charm, offering up some carefully crafted words, this outrageous entity had mastered a dog's vocabulary.

"Where-the-rivers-live," said the machine.

"What is that?" Amund's lover asked. "What's that mean?"

The boy didn't know. And judging by faces, nobody else understood. A muddled, confused rumble filled the cavern, and Washen responded by taking a step backward before repeating that very peculiar phrase.

"Where-the-rivers-live." She said, "That's our best translation of the world's name. A large terran planet. There's a dense atmosphere, minimal seasons. More ocean than land, but every continent has a spine of young mountains. The natives possess a vibrant, relatively advanced toolkit of technologies. In that, nothing is unique. Except for the fact that the population is a little under one thousand individuals, and each citizen is a living, sentient river."

Washen said, "River," and the cavern was suddenly flooded with illusions. Sculpted light was focused on every open eye, and sounds were driven into the ears and teased the vestibular systems. Suddenly Amund felt like a bird. Towering white clouds stood in an otherwise azure sky, and below him, the exuberant vegetation was every shade of blue. What looked like a dark blue river was pinned to the valley floor. Save for those colors, that could be any earthly jungle. But when he dropped low over the river, the water ceased to be water. The quivering dark surface was more gelatin than fluid. Capable of motion in any direction, this river was pushing upstream, and it was far larger than the trickles flowing through the Highlands or even the Earth's famous rivers. Flexible trunks that weren't trees lined the nearest shoreline, a canopy of arms or tentacles pushing toward the sky. Except those weren't arms and they weren't tentacles. Amund was reminded of sea anemones. That's what these were. Gigantic terrestrial anemones. And against every expectation, the boy was thinking how interesting and how pretty everything was.

Curiosity was an indulgence at best, a hazard at the worst. The Highlands couldn't have survived two generations if its citizens chased every sweet question. But long history and his culture didn't matter. All at once, Amund was intensely, selfishly curious.

The captain's voice returned.

"The Great Ship is a beggar too," Washen said. "Our hull is covered with telescopes that beg the Milky Way for light and radio noise. My ship never stops studying local planets and the distant ones too. And between the telescopes are enough antennae to shout at those worlds, begging to be heard and to be answered by any mind with the means and the desire.

"What you're seeing here is a fresh transmission. Where-the-rivers-live sent these images along with explanatory texts and certain diplomatic overtures. This world is six billion years old and clever. Commensalism is the norm. Unrelated species have woven themselves into unified bodies. The native genetics have found a very stable point where there's no boundary between the forest and the river. What you see is one creature, and, as it happens, this entity controls the central watershed of the wettest continent. Rather like our Amazon does. Except this river is longer than the Amazon, and it extends far beyond the continent. Which is another marvel, and if you want to see where the living water flows, don't close your eyes for more than a moment."

Amund clamped his eyes shut.

A foolish, incurious reflex, and he didn't know why he did it. Perhaps the eyes were thinking for him. Opening them again, he discovered that the spell had been broken, the living river was lost, and he had nothing to see but his lover staring at nothing, her gaze spellbound, shameful. Everyone but Amund was happily trapped inside that other world. And nobody else understood. That machine-infused captain had one goal for her day, and she knew just what to say to them and just what to show to them.

The boy had suffered enough. Slip home, close his door, and pretend to sleep or eat or accomplish any other human task. That's what he was planning to do. Except his legs had a different opinion. Instead of taking him home, they found the quickest stairs, carrying him toward the captain and her fine voice and that very pretty face—the polished face of a beautiful marble statue dedicated to some ancient, unreachable deity.

Washen's voice continued to sing out.

"Serving as a captain, I've been fortunate enough to meet multitudes," she boasted. "Species from very strange worlds, and species from worlds unnervingly similar to the Earth. And every point between. But this realm, Where-the-rivers-live, is like nothing else. It's fresh and it's wondrous, and on the basis of novelty alone, I would invite a trickle of any river into the Great Ship. I would build a habitat where their nature and beauty could thrive. And if the creature didn't have the resources to afford passage? I'd pay its way. That's how interesting these creatures are to me.

"But there isn't any need for charity. Where-the-rivers-live happens to be the only inhabited world inside a solar system rich with potential. This transmission came with an offer. In exchange for passage on the Great Ship and certain new technologies, the living rivers will grant us full possession of two hot planets and two cold moons. Four worlds, each of which can be terraformed, and any one of which can become a home for humans."

She said the local word for "humans." That was a critical detail. Or she was careless, which seemed very unlikely. By then, Amund had reached the cavern floor. Elders and the high faithful were crowded around the captain. A few of them had stopped watching the show, but they continued to stare at their guest, mindlessly smiling and nodding. Most of the audience remained lost in the astonishments. But of course nothing they saw had to be real. Everything was a lie. That possibility ambushed Amund, frightening him and making him angrier than ever. Which was rather pleasant. The boy enjoyed being enraged by the one-sided nature of this mess. An immortal machine had marched into their little cave to tell them a ridiculous story, forcing them to watch invented lights and invented sounds, and this was such an easy trick for a god, making stupid little humans believe in any preposterous world.

But why would Washen lie?

To embarrass Amund's people, obviously.

That paranoid idea was exactly what he needed. Rage gave him courage, and courage gave him the power to say anything or do anything.

"Safety for the passengers," said Washen. "That's every captain's first duty. After that, we care for the Great Ship, and then, we welcome new passengers onboard. But there's a fourth duty waiting. Humanity used to be a minor species. We were late to the business of star travel, but then we found the Great Ship. In the tens of thousands of years since, this beggar of a starship has left multitudes in its wake. New worlds by the thousands, all claimed by our people. Immortals like myself, and humans like you. And those colonists, your brethren and mine, will rule the galaxy for the next ten billion years."

With that, she paused.

The invisible spectacle must have finished. Eyes were blinking, faces smiling or frowning, and many people shyly looked at their neighbors, trying to gauge what this

magician's trick had done to their tiny souls.

That's when the great captain was rudely interrupted.

"So what the shit do you want from us?"

Amund shouted those caustic words.

Turning, Washen looked at nobody but the rude boy.

He instantly regretted his action, but in the next moment he was angry all over again. For his doubts, for her invasion. But mostly because he was a stupid little bit of humanity. Amund existed only because the captain machines allowed him to live inside what was little more than a tiny drawer. Washen's kindness was what kept all of them alive. Unless it was her utter indifference to their little existences, and when the time came, she would throw them out, replacing them with richer, more interesting tenants.

That's what passed through one young head.

Washen's thoughts were a mystery, then and always. What kinds of elaborate calculations was she making, transforming this complex, ever-shifting event into the best action? But of course the mathematics were easy. After all, she was one of the finest machines ever fabricated, standing before a tribe of primitives, all of them easily swayed and just as easily forgotten.

"So what the shit do you want from us?"

For a long breath, nothing happened. Except that Amund kept finding reasons to grow angrier.

"The Great Ship," the captain began.

Another pause.

"And our hands," said Washen, holding her hands towards the basalt sky. "Ships and hands have limits. We're passing through the Galaxy, and yes, we're aiming for the most fascinating portions of the Milky Way. But our speed and course are inflexible. Most solar systems remain out of reach. In reality, there's only a narrow cylinder of space that our shuttles can reach, and then they have to return to us again.

"Where-the-rivers-live is very close to that cylinder's edge. Velocities are law. Time is short. And wise as these rivers seem to be, they don't have their own starships. They might build some workable craft soon. Even a tiny river has astonishing talents, and working together with a world's full resources . . . well, they could possibly launch a starship or two in the next few years. But there isn't time to wait and hope. If we want the rivers to live with us, we have to make our own round trip. And to achieve that, there is a plan. The plan is underway already. This morning, a special streakship was launched. That ship was pre-built and then mothballed for a day like this. It's massive and full of fuel and exceedingly well protected from the dangers of deep space. But there is no crew. Shaped nukes and war-grade lasers are accelerating it to a healthy fraction of light speed. It's exactly the kind of vessel that can race out to an alien world, landing under the guidance of AI pilots, and then wait for its passengers to board."

Washen was ageless. Except when she paused, as she did then, she looked like a woman who had endured a long, difficult day.

Two breaths and she spoke again.

"The living rivers have explained themselves. And that includes some inflexible ideas about ceremony and symbol and the value of life. Which they cherish, by the way. More than most species, the sanctity of organism is held in the highest regard. Perhaps because they are so few, and by any measure, they are so very old."

The captain took a long step forward, studying the ignorant young fellow who seemed to have forgotten how to talk.

"Their largest river claims to be older than earthly vertebrates, older than our sponges," she said. "So we're battling some instinctive, unyielding ideas. There are also the horrible limitations of time and our room to maneuver. We spotted their

world years ago, studied them and built an offer of friendship. Two Venus-class worlds, two icebound moons. That was our initial offer. Which is a fair price, a modest price, considering the technologies we'll share and the places that we will take them. And the rivers have agreed with us. They'll give us everything we want. Four substantial worlds, with space for hundreds of trillions of good people. When you talk about mortals. If you can imagine millions of generations of humans living beneath this orange sun."

Washen took another step forward, standing that much closer to Amund.

He wanted to run.

His feet preferred to hold their ground.

"One icy moon will be warmed and then bathed in a delicious atmosphere," the captain promised. "Then it will be given to you, the humans, and you and your trillions of children will live out their lives on this spectacular new realm."

Except there wasn't any joy in the machine's words or her face. She was a grim, all-knowing god, talking to tiny entities who couldn't appreciate the shitty choices that she had to walk through.

"Four worlds would be an enormous gain for our species," she said. "But it requires one quick mission that culminates with a brief, brief ceremony."

"Which is what?" Amund meant to shout, but his words emerged as a guttural whisper.

Did she hear him?

"What ceremony?" asked twenty other voices.

"This is a very ancient dance," Washen explained, "One creature must symbolically merge with another. Two unrelated rivers must join. And to accomplish that, the rivers demand that we offer a single mortal. 'A piece of your river,' they call it. Which means that they're demanding a human sacrifice."

Amund was ready to feel surprised, yet he wasn't. He anticipated being enraged, but nothing like anger offered its help. One life? Not only did that seem reasonable, it was such a tiny gesture, and he was instantly thinking about the people that he grew up with. Idiots who wouldn't be missed, at least after a few happy years.

"Two officers will accompany our offering," Washen continued.

It was the first and only time someone used that word.

"Offering."

She said, "My finest exobiologist and my best diplomat are going. The goal is to change the terms of this agreement. Surrender an arm or kidney, or give away a beating heart that we can replace without fuss. But I can't guarantee survival for anyone. This will be a long sprint through deep space, and shit happens. Yes, it does. But if this mission does reach Where-the-rivers-live, and if any deal is struck, then more starships will be dispatched. Slower, much larger and safer vessels will drop away from the Great Ship, make some complicated dances with other stars, and after a few centuries, your descendants will set down on your new home."

She paused, and most of the audience imagined Paradise.

"I won't make your choices," she said. "And I wish I could explain more and answer every question. You must have endless questions. But there's a timetable at work. Moments matter. The second streakship has to carry passengers, which means that it can't accelerate as quickly. And it has to launch within two hours and seventeen minutes, or it doesn't leave. Which might be the best solution. That could be argued. Do nothing, let this opportunity pass, and consider ourselves fortunate, even if we aren't."

On the one hand, Amund was listening carefully. Yet he was also thinking about nothing. An empty place waited inside his skull, black and ready. Ready for what? Then it arrived. The obvious, unavoidable idea. Hundreds, perhaps thousands of lud-

dite communities were scattered across the Great Ship. "Luddies." That's what the machines called humans. Luddite was an ancient word that was never charitable, never endearing. And if time was critical, then dozens of captains must be standing inside those enclaves. Right now, each persuasive machine was making her best plea to the silly luddies. One tiny, awful sacrifice. That's all that was needed, and the gods were playing a very cruel game.

Infuriated, the boy felt justified as he marched straight toward an entity who couldn't have looked taller or more formidable. His plan was to smack Washen and get killed for it. Which almost certainly wouldn't happen. What harm could he do to any captain? But no, that promise of violence made him brave, and the courage lasted until she smiled at him, revealing what on any face looked like grave, sorrowful pain.

A step short, he paused.

His little world fell silent, every eye fixed on the empty air between the two of them.

And that's when Amund finally realized what was obvious. That he wasn't angry at captains or distant alien rivers. Not then, not ever. The emotions lived inside him, and they couldn't be anywhere else. Self-doubt and self-loathing had eaten away too much. He was a frail incurious idiot, suddenly looking back at the elders and up at the woman that he had slept with and probably would have had children with.

"Except I won't sleep with her again," he was thinking.

Why was he thinking that?

Standing at the center of the only world he knew, Amund was utterly helpless, trying and failing to see where any silly idea came from.

\* \* \*

### 3

Exobiologists didn't take worlds as lovers, and no mission deserved to be confused for an elaborate, high-stakes courtship. Missions were missions. That was the blunt, clean, simple, and inescapable truth. Civilians, ignorant captains, and even a few of Mere's colleagues insisted on confusing the exploration of new realms with sex. But sex was simple. Lust wanted to be kindled again and again, and that's why it was so very easy to lose one object of affection and find another. For Mere, an impressive sequence of temporary husbands had proven the fallibility of love. She had had alien ex-husbands and the rare human, plus hundreds of intense brief passions. Well-schooled in every aspect of coupling, Mere enjoyed herself well enough, thank you. But walking gracefully across the face of a new world was something else entirely—an undertaking so much larger and richer and far more rewarding than any fireball infatuation.

In love, there was a rough sense of equality. Two souls in harmony, and so on and on. But even the ugliest little world was far greater than any soul. There were missions where Mere's footsteps and her shadows were never noticed. And even if her presence was experienced by the natives, what did that mean? Very little. No world ever dreamed about Mere's touch or the heat of her breath, and even if ten billion citizens knew Mere's face, it didn't mean that one of them ever woke up expecting her beside him in bed.

Missions were asymmetric, and because of that, they were infinitely beautiful. Standing where no human had stood was so much richer than copulating with a beast or high officer. Romance meant choice, but Mere never had choices with worlds. She went where she was needed and did what she did very well, and for as long as necessary, too. Had she ever studied a realm that didn't deserve to be ad-

mired, if not outright worshipped? Once, perhaps twice, but no more than that. Love held the promise of disappointment, even out and out treachery. But the sane mind couldn't be disappointed by worlds, much less blame them for their failures. Creative, experienced eyes could see the momentums that defined a planet, and Mere understood firsthand how the great momentums refused to be changed. Orbits and seasons were decided by suns that cared nothing about their children. Likewise, the world's inhabitants carried their biological limits as well as a compelling, often poorly understood history, and enduring cultures were entitled to their grudges, plus the occasional out and out war.

But individuals weren't worlds. Individuals didn't have excuses, and that was certainly one reason why Mere's marriages rarely lasted longer than a decade or two.

No individual deserved any excuse.

That's what the little woman believed, and she held herself to the same maxim. Her job was to be as a one-souled invader. She might be disguised, swimming unnoticed among the schooling aliens. Or to suit some dramatic need, she rode thunder and fire into a world capital, little arms raised as she introduced herself as a small, peculiar god. Each mission had its first goal and its second and the rest. Each was a mess of calculation and improbability. The hardest, best, and most often memorable missions were those where Mere and only Mere decided who would ride on board the Great Ship. Did she make mistakes? Too many, yes. The Ship's history wore a few blunders. And because Mere was ageless and strong in so many ways, the woman could spend centuries considering her personal grief about each blundering step.

She despised evil, but true evil was scarce in the Universe, and once identified, it usually proved frail. Broken thinking and self-made idiots were common hazards, but they weren't the most dangerous enemy. The inability to feel responsibility: That was what terrified Mere. It was the capacity of too many colleagues to misstep horribly and then retreat back to safety, nothing learned, not so much as a wisp of grief inside their happy minds. And worse than that, there were people with famous biographies and tremendous powers who didn't deserve to throw their boasts at others.

Rococo.

Mere's opinion was Mere's. Few shared her disgust for the diplomat. Even reasonable, compassionate Washen disagreed with her tiny, alien-born exobiologist.

Of course it helped that Rococo began his service to the Great Ship long before Mere arrived. Also, the man's work had transformed alien worlds into good friends, and partly because of his considerable record, humanity was spread across a twenty thousand light-year journey. And Rococo was instrumental in some famous missions and critical moments where the impossible was accomplished. For instance, he willingly joined the bal'tin on a breeding/slaughter mat, legs properly crossed while ten thousand entities coupled and died around him. That was a nightmare ready to test even the most flexible-minded entity. Yet Rococo managed to sit where no other diplomat would sit, offering the best words while enduring the foulest odors. And now the bal'tin were devoted allies, and their metal-rich comets were home to millions of human settlers.

Mere understood the diplomat's mission. A proud, vainglorious creature like Rococo could accomplish miracles.

But she also happened to be the first scout to meet with the bal'tin. Before any diplomat arrived, she lived in their ranks for years, secretly and then openly. As the first face of the Great Ship, she instructed her new friends about her origins and the ancient laws of the Galaxy, preparing the way for the researchers and diplomats bearing down inside that much larger second wave. And in every report, Mere was blunt. The bal'tin were blessed with unusual minds. Left alone, they would likely avoid the disasters that often killed species and worlds. War wouldn't be an issue.

They loved death too much to waste it on useless slaughter. They also didn't have careless hands that too often led to ecological disasters or vicious AIs. No future was set in hyperfiber, but the bal'tin were on a tangent that might lead them across thousands of light-years, and as a consequence, the Milky Way would be a much, much richer place.

But the scout was only a scout, and she was replaced by a fellow with huge reservoirs of charm and confidence. Rococo sat on the same ritual mats that Mere had experienced. He had to suffer the most bizarre behaviors known to exobiologists, and to his credit, he endured longer than Mere had. And the outcome was a deal that left humanity with a considerable portion of that solar system's resources. Comets weren't often laced with iron and uranium; bal'tin comets were a prospector's dream. The natives would have flourished once they reached their Oort, but one exceptional diplomat impressed them too well, and now the odds had changed, the bal'tin far less likely to mount any assaults on galactic history.

"There's no translation for their name," she mentioned.

They were several years into the present mission. Their streakship was still accelerating, obliterating fuel until that point where they would flip and then fire the engines again, convincing the Universe to slow down around them.

"But the concept behind the name is simple enough," Rococo said. "The Universe is a spectacularly narrow line, and that line is drawn between spawn and oblivion. The bal'tin are celebrating that line. That's what I kept telling myself. And that's why it was critical to sit there calmly, farting preplanned farts, and if they wanted to play with my genitals, I let them."

"I know the mats," she reminded him. "And I know how to fart, too."

Rococo had a fine smile when he wanted. But not then. "So, Mere. What is your difficulty about me?"

"You took more than you should have," she said.

He laughed. Without his usual decorum, Rococo acted as if she was an idiot and pitiable because of her silly mind.

Amund was sitting nearby. He had little choice. Their ship's mass had been stripped away at every turn, increasing their range but limiting space. Amund only had his tiny quarters and this slightly larger common room, and they were accelerating to the brink of what a mortal body could tolerate. Simple motion was a struggle for the young man. More than not, he would spend years on his back, and with nothing to watch but two ancients acting like petty bureaucrats.

But not that day. That day, the man interrupted them. A sharp little voice said, "I have an opinion, if you want to hear it."

"I do," Rococo said.

"By all means," said Mere.

Their companion was a stubborn, frustrating puzzle. Whatever they called themselves, humans or luddies, the mortals were usually courageous believers in the temporary nature of life, and most importantly, they were endowed with the sacred duty of passing out of existence, making way for others. Yet Amund didn't seem to be that sort of animal. Surrendering his life for a cause? No, he was missing the noble heart, and more importantly, the self-congratulatory flair. And there was no trace of the natural explorer either. They were traveling to a realm as alien as any, yet day after day, he asked nothing. Read nothing. Even went so far as to ignore the latest broadcasts from the rivers. Even his conviction for his faith failed to convince. He was an authentic human sharing a tiny volume with machines that pretended to be human, yet he couldn't muster the proper disgust. Particularly when he stared at Mere, which was often and always with a keen intensity. In other words, Amund was exactly the wrong kind of fellow to willingly sacrifice anything so precious as his own life.

"I have an opinion, if you want to hear it."

"I do."

"By all means."

He smiled, in a fashion. "First of all, I don't give a shit about those left-behind aliens. The bal'tin."

Rococo smiled, and Mere smiled.

Their companion glanced at the diplomat. Then he twisted his neck and stared at Mere. Whatever he wanted to say was ready. That much was obvious. Perhaps he wrote the words months ago, biding his time for the perfect moment.

"Just so I'm certain," Amund said. "You two have never worked with each other. Not in any direct fashion. Is that right?"

They never had, no. And they wouldn't have collaborated here, except both were available when the rivers shouted at the Great Ship, and a mission built on high stakes and inflexible parameters had to use the very best people.

"Well, that answers one mystery," the mortal decided, lifting his body from the cushions, apparently for no reason but to shrug his shoulders at them.

"What does that explain?" Mere asked.

"We're going to visit some peculiar beasts," Amund said. "As soon as we get there, the two of you are going to do your dances and give speeches, trying every kind of magic. And when the job's done, you'll declare the winner."

That earned a long pause from his audience.

"That's all that this loud stupid endless dance of yours is trying to decide," Amund said. "Who is the goddamn best."

\* \* \*

#### 4

Five days of floating and then water stopped being water. The cold river thickened and grew blue, but still not blue enough and not nearly thick enough. This was good news or bad. The immortals offered conflicting opinions along with evidence that always seemed starved. Which was the inevitable problem. Orbiting war machines had hammered their little streakship. Nothing but their crash vault survived the landing. Sensors and other fancy tools would have been invaluable, if only they could have been salvaged. What they possessed was one heavy backpack with a survival kit onboard. The fist-sized reactor was powering a Remora-built factory, food and pure water delivered without fail. The kit also supplied lights in the darkness, and for one of their ranks, medical help. Everything else was done by the smart fabrics. Clothes and boots, boats and shelter. Honestly, if the immortals were a little less brilliant and a little more shrewd, they would never leave their homes. Shirts and trousers could march into the unknown Universe. Ruled by some very strong underwear, of course. With gloves and boots ready for the really hard shit.

"You're laughing," Rococo said.

"I am," Amund agreed.

Mere was kneeling below them, studying the boundary between normal water and what was alive. The living rivers were built from protein weaves, concentrated salts, and dissolved metals, giving the bodies their characteristic density, the irresistible mass. That's why the wild river flowed over the blue flesh, and the flesh drank what it wanted for the next few hundred meters, which was the point where the wild water was swallowed up and gone.

Amund and Rococo stood on higher ground, accompanied by a knee-high forest of blue-gray toadstools that weren't toadstools. Little winged beasts were resting nearby.

They resembled bats but perched like birds. Not alien so much as wrong. This ecosystem was simple, weedy, and inefficient, but the living river was close. Its blue body was viscous and warmer than the surroundings, promising that it had recovered from the firestorms. The immortals were assuming that the river was conscious. Which was a good sign, Mere claimed. Rococo claimed. But that didn't mean that this was the same river that spoke to the Great Ship, promising planets and moons. In some fashion or another, that creature was a casualty of a very peculiar war.

A long while passed, and then Mere finally stood, gesturing to her colleague.

"Wish us luck," Rococo said.

"I'm stupid," Amund said. "But I'm not superstitious."

Laughing at that, Rococo set down the pack and walked down to join Mere. The two of them spoke for a moment and then walked together without walking together, working their way downstream.

Amund tried to lift the pack and kit with one hand and couldn't. He barely succeeded with both hands and his back. This world had too much gravity, which was another reason to feel endlessly tired. After age, that is. The pack was hyperfiber mesh doctored to look like old canvas. Amund made a request, triggering small motions inside, and he reached beneath the top flap, his hand closing around an edible flask filled with a flavored water. Then he drank the chilled sweetness before eating the exterior like an apple.

The immortals continued their hike, and Amund tried to think about anything besides them. The antirad patch riding his neck began to itch. He scratched at the irritation. Machines didn't care about radiation, certainly not at these background levels. But without the patch, Amund would die in a matter of months. And without the filters moored inside his windpipe and lungs, the over-oxygenated air would poison him in minutes. This was a landscape populated with survivors, and that included one extremely fortunate human.

Another laugh, and without the help of mood enhancers or alcohol.

What a day!

A final piece of honest ground allowed the two machines to stand beside the gelatinous blue. That's when a historic conversation commenced, or there was no conversation. Either way, they spoke to the river and nothing happened. Mere and Rococo offered words, and nothing changed, and nobody should be surprised. The captains had taught this world the Ship's common language, but that was before the carnage. That was before most or all of the original river boiled away. This new creature might be as ignorant as a baby. They might have to start from the beginning, teaching the baby how to talk and what to think about them. And superstitious or not, it was hard to ignore the luck required to reach the return ship and reach it with time to spare.

That first streakship was Amund's home for too many years. He never liked it and always dreamed about escaping from it. Yet there were moments, baffling frustrating moments, when he caught himself grieving for that frail machine.

"Salvation." That was their nickname for the return ship. Standing like a mechanical hill, like a castle of superior hyperfibers and fusion engines, *Salvation* had landed years ago. It set down on a small coastal island. The onboard AIs were always awake, busily sending out promises that the machinery was healthy, fueled and eager to help. But those giant engines were configured to launch directly into space, not rise slowly and then conveniently set down beside them. Half of the continent needed to be crossed. There was no other way. And without a wild river to ride, this living river had to help. Otherwise the walk would take months or years to complete, and long before that was done, the Great Ship would be unreachable.

And Amund would most likely be dead too. A thousand obvious causes offered themselves. Accidental falls, self-inflicted wounds. Cancers born from myriad decay-

ing atoms. Or inevitable age. But not Mere and not Rococo. Even marooned on this broken world, their modern guts would learn to digest the native organics, and the fallout would cause nothing more than odd, beautiful blemishes. Standing together or apart, the immortals would be able to watch the stars slowly shuffle positions in the night sky. Three hundred thousand years later, the Great Ship would come back around, and those two machines might still be standing here. Except for little changes wrought by the experience, they would be the same machines. And blessed with perfect memories, they would have the power to see Amund's face and hear his voice, remembering every word that he shared as well as his bitter little laugh. In that fashion, the human would be kept alive long after his time.

The sun moved today, and the machines didn't move. What was human about them looked bent-shouldered and worried.

"We're screwed," Amund muttered.

Then came a slight pressure. The patch on his neck was being touched by a finger, but not his finger. And with the pressure came heat, not scorching but distinct and out-of-place.

A voice was behind the finger.

"You," it said.

Not a man's voice, not a child's. Female, perhaps.

"What about me?" he asked.

"A pure river."

Amund began to turn, but several warm fingers grabbed hold, fixing his head where it was.

"Who's a pure river?" he asked.

"You are."

The voice was close, and she sounded scared. Except nothing about the voice could be trusted. A vast strange and utterly gigantic creature was projecting noise for the same reasons that anything spoke to anything. To be understood, and hopefully, to manipulate her audience.

"You are the pure river," the alien said. "You are the undiluted true river that came from the stars to join us."

A few words, and one man's life shifted.

"That's how I look to you?" asked Amund.

"How you look, how you are," she reported. Then a long blue digit appeared beside his head, jointless and rigid and very thin. What wasn't a real finger was pointing at Mere and Rococo. "Machines," she said.

"My companions?"

"You call them 'machines.'"

"So. You've been watching us, have you?"

"Since your arrival," she warned.

This surviving trickle of a river had an unsuspected reach. Studying them through the flying bugs, perhaps? Amund smiled at the news, feeling nervous and alive. "What do you think about those two machines?" he asked.

"They terrify us."

That deserved a good laugh. But Amund stifled the reaction. "Why are you scared?"

"They attacked us."

"Did they?"

"Yes."

"But how did they attack you?" he wanted to know.

Silence.

Holding a hand to the sun, the pure river cut the glare in his eyes. "What weapons

did they use?"

"Poison," she said.

"I don't understand."

"Poisonous beliefs," she said.

Amund nodded politely, understanding nothing.

The blue digit was retracted.

"Those dangerous machines down there," Amund said. "They're hoping to reach that second starship. Which leads to the question: Are you going to help them?"

"No."

"No?"

"They are dangerous, and I won't help them."

Amund lowered his hand, sunlight burning his eyes. "Believe it or not, you sound like the pure little rivers I grew up with."

"How do I sound?"

"Like a cowardly little puddle of piss," Amund said.

The giant river said nothing.

"Those monsters don't scare me," he added. And after that, Amund felt as if he could take his time, sitting quietly while deciding what he wanted most, and then finding the very best way to make it all come true.

\* \* \*

## 5

Bold action or bolder inaction. Those were possibilities, but only once. Only at the beginning and for a ludicrously narrow moment. Ignorance was the chief problem, but there was also a reflexive sense of duty, and at least in Rococo's case, thousands of years of hubris stirring him to action. Those living rivers were a grand mystery, and mysteries always generated curiosity. The actual voyage promised to be a routine haul across empty, well-mapped space inside a proven machine. The diplomat had survived wilder dashes through space. It was the target world that was unique, barely studied, and unlike anything else. But at least they had the long voyage to prepare. In that light, the plan felt reasonable. Where-the-rivers-live promised to maintain its high-density broadcasts. The Great Ship would continue studying their target and send updates. Even better, Rococo and Mere were the best two for this work. And the third member of the crew was free to offer odd insights as well as his skeptical silence—qualities that Rococo appreciated more and more as the journey unfolded.

The midway point was reached without incident. Telescopic data from home remained enthusiastic, but of course those were old images growing even staler when they traveled back up to the streakship. The direct alien transmissions were a few years old but younger with every breath, and they offered updates about every subject: Industrial growth and half-finished star drives, plus some exceptionally precise measurements about the world's general enthusiasm.

"Bullshit."

Amund refused to be confident.

"Pictures and noise," the luddy warned. "Those aliens shape the data however they want."

Naturally, every broadcast was a staged event. That was true when humans threw shadow puppets up on their cave walls, and it was certainly true about the rivers as well.

"This could all be a con job," Amund said.

Rococo didn't believe that. There was no great deception. AIs analyzed the feeds, proven algorithms raking the data for lies and signs of madness and any other flaws. Because every lie carried telltale flaws. But this was a long-closed society opening up to a greater world. The evidence said nothing else. Inspired by the Great Ship, those ancient rivers had decided to reach into space. To help their prospects, they were giving away four of their worlds, but that left plenty of other cold moons and comets for them to claim and then transform.

They were two years out, and nothing had changed. Nothing was wrong. Not a sign, not a rumor. But in mid-broadcast, the largest river stopped transmitting, and within minutes the rest of that world had fallen silent. A full day passed without words. Mere was working with the shipboard telescopes, trying to boost their sensitivity high enough to get a good glimpse of what was happening. But before she finished, the voices returned. Except they weren't voices. The scarce and weak and urgent transmission showed them nothing but wordless imagery. Every river had been struck by fusion weapons. The aliens were boiled on the land and shredded under the ocean. The diplomatic mission was dead, every agreement lost. And Rococo realized that years ago, facing a choice, the bold, brave, and exceptionally wise decision would have been to do anything but go on this fool mission.

"I should have strangled my curiosity."

He said that to himself and the others. Obviously, telescopes and automated probes could have done the necessary research, and today the three of them would be sitting safe inside the Great Ship, watching a distant world burn itself to a cinder.

But of course this was where they were. Trapped inside a streakship whose engines were punching at the Universe. There were zero choices. They were on a collision course with disaster, nowhere else to fly. Mere and Rococo continued studying the rare broadcasts. Preferring to ignore awful news, Amund remained inside his cabin for days at a time, appearing only to hear a few specifics. And even though he had little experience with aliens, and very steep barriers to learning, the man did try to make sense of what was happening.

"It's greed," he declared. "The rivers got selfish, and some of them went to war with the others."

Rococo and Mere shared a glance.

Reading faces, Amund said, "Unless I'm wrong. And I know you're not shy about telling me that."

"It's not war," Rococo said.

"What then? Did two big rivers get into a brawl?"

The luddy had made another obvious, very human mistake. "War" and "brawl" were two good human words, and deceptive. Rococo had the same problem. He couldn't reliably explain the situation, and that's why he smiled at the exobiologist, saying, "Tell our friend his mistake."

"Oh, I was wrong, too," she offered.

It was sickening, this abundance of ignorance.

"If I'd studied those first transmissions more thoroughly," Mere began. "Or better, if I'd taken the trouble to model the rivers' biology. I could have seen the problem. If I'd made all the right assumptions, which I probably wouldn't have done. But let's pretend I did."

When Mere spoke, Amund stared at her. Even when the topic was too new and too complicated, the mortal appeared to be intrigued by whatever she had to offer. And when Mere wasn't speaking, the man would watch her face and watch her hands, waiting for that inevitable moment when those odd, oversized eyes glanced at poor idiot him.

And with the same sturdy resolve, Amund kept ignoring Rococo. The most obvious

drama in the Universe was the luddy's hatred for the other male onboard this one-lady ship.

"This isn't war, and this isn't a grudge match," Mere was saying. "The blast patterns. The transmission patterns. And both of you, pay close attention. Look at the flow in these videos."

Rococo focused on the images, but he wasn't sure what he should be seeing. He and that other fellow were on the same footing, both spellbound by the tiny woman who was explaining how thoughts and planning crept their way through each of these great rivers.

"The speed of belief," she said.

Thousands of years old, and Rococo had never heard that expression.

"What the hell is that?" Amund asked for both of them.

"The speed of belief," she repeated. "One river acts like a single organism. It moves and speaks as if it's unified. Which is very reasonable. We know its thoughts are quick. Chemoelectrical speeds, hundreds of kilometers in a second. The largest river can react to any outside stimulation and every interior need. Resources pulled from the crust. Reserves tapped for projects deemed suitable. Like its desire to build starships. The rivers claimed that they didn't see the need before us. They barely had enough curiosity to build giant eyes and watch the Universe. And what did they see out here? Tiny creatures gathered around lesser stars or riding inside ridiculous little spaceships. And a lot of empty cold space too.

"But then the rivers saw us. They saw the Great Ship. Here was the first genuine marvel. A billion years old, and the organisms had finally found their superior. And because of that, they made promises to do everything possible to gain passage on our grand home."

She paused, returning Amund's gaze.

Did he understand any of this?

The man was sitting up, which was unusual. But this was an important, sit-up-worthy moment. That body would never adapt to the high gees, yet he never complained about aches or the occasional cracked bone. Rococo held some uncharitable opinions about Amund, but despite being doubtful and sullen, the man never quit proving that he was also an exceptionally tough mortal.

"What does that mean?" the luddy asked. "The speed of belief?"

Mere glanced at her colleague. "Would you like to explain?"

"You'll manage so much better," Rococo said instantly. The portrait of gracious confidence, he had no interest in trying to convince the others that he knew what he was saying.

Mere nodded and thankfully continued.

"Belief isn't thought," she said. "And belief isn't a reflex either. What we believe is woven into our nature, and regardless of how we act and what we say, we can never kill the voice that says, 'This is what should be, and the rest of it is wrong.'

"And the principle of belief . . . well, that can be far, far more important inside giant creatures. Vast minds have to work around their size and sluggish reflexes. That's why convictions are something held everywhere at once. Every million tons of neurological matter is infused with complex expectations and stubborn faiths. The river has one mind, yes. But not a mind we would recognize. Spread yourself across thousands of kilometers. Trillions of tons of stubborn water. That's what I think we're watching here. At some level, the rivers decided to embrace this new existence, building industries and reactors and tremendous new machines. Except nothing was decided. One belief had the power, and that power was wielded right up until the contrary belief decided enough was the hell enough."

Rococo stopped her. Lifting a hand, he said, "Wait. That last transmission, the one

that got cut out in the middle.”

Mere nodded, smiling grimly.

“The largest river was sending us some very detailed plans,” he said. “Plans for the conquest of its solar system, including construction of a hundred billion kilometer long river that would spiral out from the sun. A living river thriving inside cultured diamond and fusion light.”

“That might have been the trigger,” Mere admitted. “A fantasy of dream and high physics, and it was too much. Too crazy, too wild. Too dangerous. There’s no being certain here, but sure, that’s why the conservative beliefs had enough and panicked. One daydream, and that’s what nearly killed this world.”

Amund was relatively young, not particularly gray, and carrying those boyish eyes. But his voice had always been older than his appearance, more lucid, and far more thoughtful than Rococo might have expected.

Speaking plainly and slowly, Amund said, “This giant mess. What we’re flying toward. You’re claiming it’s because some voice or voices told a story nobody else liked?”

Mere said, “I don’t know.”

Then, “But I believe that’s possible, yes.”

There was a joke here, but nobody laughed. Glancing at Rococo, Mere’s expression grew even more serious than before. Something new had to be shared, perhaps something that she just discovered.

“What else?” Amund asked.

“What else?” Rococo echoed.

“There’s another belief at work here,” she warned. “I can see it in the last few broadcasts. The rivers that are alive now . . . they don’t just simply hate the deal made with us. They’re acting like they don’t want to allow us to come close. Maybe we’re contaminants. Or we’re a disease. Perhaps we’re even monsters.”

“But you are all those things,” Amund said. “Didn’t you know?”

The immortals tried to laugh, and the luddy grinned while saying nothing else.

Closing her eyes, Mere examined the latest data.

Rococo couldn’t shake that crippling premonition of being doomed.

“Their world’s mangled,” she reported. “But there’s enough organization and industry left to throw new satellites into orbit. Right now, my best look is showing me a single pusher stardrive powered by hundred-megaton charges. It’s orbiting close to the sun. Judging by its orbit and its focus, I’d guess that it’s watching a specific piece of the sky. The piece of sky that we’ll fall out of. And it could be used to intercept intruders. Which is nobody except for us.”

Their engines surged or Rococo was suddenly weaker. Either way, he felt his legs folding, delivering him to the cabin’s floor.

“Any more splendid news?” Amund asked.

“Actually there is good,” she said. “The rivers tried to attack our other streakship. I don’t know how many bombs were launched. But what’s the difference between a comet approaching at half-light speed and a fusion charge bearing down at a few thousand kilometers per hour? The difference is that bombs are easier to stop. Lasers tore them apart. Only a few detonated, and those at a distance, and the streakship’s armor is too high-grade and proud to shatter.”

She paused long enough to sigh.

“Our salvation ship claims to be ready to launch, and that’s what I would make it do now. I’d launch it now and have it meet us and save us. If I could get the orbital motions to agree. But the motions don’t work and never will. The one blessing we have is that if we survive the megatons, and if we live to reach the surface, and if we happen to be in walking distance too . . . well, then we have a viable way home.”

One of them was destined to die soon, regardless of events. And he was the one

who insisted on laughing.

"Belief," Amund said.

"That's what this is about?" Amund asked.

"Stubborn, stubborn, slow to change, and far too big to see the need," he said. Then he shook his head, saying, "Shit, that sounds like you and me. And particularly, both of you."

\* \* \*

## 6

The rivers' pre-catastrophe broadcasts used the Ship's language, and that's what the two of them spoke now. Most of the day was invested in vain efforts at conversation. The creature didn't respond but there was no end of noise, moving water and the slurping of slow gelatins mixed with the chirpy whine of little creatures lurking along the shoreline. Sometimes Mere would hear what sounded like a spoken word. Or Rococo. Except no, that was imagination at play. Only one of them heard the voice, not the other. Fear and fatigue were on display, and despair, the desperate mind inventing a soft "hello" just to feed itself that momentary dash of hope.

Preset strategies were followed, but without any sense of being heard, Rococo eventually abandoned that original script. A wink to Mere, and he launched into a peculiar story about the roaring majesty of a newborn river, and how a boy stood too close and was swallowed, drowning without dying and then left lost inside a wasteland of mud.

Mere found herself listening, and then listening carefully. But just as she became intrigued by the buried head and the thoughts trapped within its mind, the story was interrupted.

A clipped, clumsy sentence was offered.

"I hear you," said the river.

"Are you listening?" They'd asked that hours ago. Was this the river's response, and what did its timing mean? Mere had no way to answer either question. She'd never conversed directly with any river. Was the alien innately slow? Maybe those words had to be drawn from memories stored hundreds of kilometers from here. Or maybe rivers were patient, or this river was being cautious. Unless it had taken this much time to build a working mouth. Or the river wanted to ignore them entirely, and this phrase had leaked free, like a small social blunder.

"I hear you," came out from that blue-gray surface.

A rather human, entirely feminine voice.

Rococo quit sharing his secrets.

Then the river said, "I hear you and understand every word, and you say you need me."

"We need you," Mere agreed.

"You need to be somewhere else," said the river.

Rococo said, "Yes."

"On your great ship," said the river. "But you need to cross me and stand inside your little ship. Yes yes yes?"

"Yes" was an excellent word for most situations.

Mere said, "Yes."

There was a pause, almost too brief to notice. Then the voice declared, "I will carry you."

It was Mere's experience that the Universe was built from questions. And every question, particularly the richest few, triggered a cascade of possible answers. But

she refused to push any hypothesis ahead of the others. In her work, guesses were hazards. Every insight invited belief, and nothing was more dangerous than revelation. The exobiologist never stopped fighting the impulse to frame what she was seeing. Believing the bare minimum. That was a wise strategy, and that's why she couldn't accept the river's good words or its sudden promise to help.

Whatever the situation, it was time to call to Amund.

The mortal hadn't moved for hours. Sitting on the high ground, he nodded down at her while pulling a hand across his mouth, as if pushing his jaw closed. Then he stood, one arm and then both arms helping him lift the backpack and kit, and as he walked down the brief hill, Mere noticed what was different about Amund. The local gravity was intense, and the man had to be tired, but she thought that she saw the beginnings of a swagger riding on those short, careful steps.

The river had fallen silent. Sacks of salty water gathered on its surface, proteins inside the sacks weaving structures that quickly linked with their neighbors. Then the water was yanked away from the sacks, with a shrill keening screech, leaving behind a peculiar and mostly dry object that looked like a boat and smelled exactly like fresh meat.

Mere didn't believe any good news, but Rococo was a portrait of enthusiasm. Looking back at the mortal, he shouted, "We have a yacht now."

Amund was smiling and then he wasn't.

Winking at Mere, Rococo said, "Every world looks better when you don't have to walk it. Don't you agree?"

The gift was no yacht. The object resembled ancient pontoon boats, except unlike any vessel cobbled out of animal hides or spun boron, this boat would never float. Certainly not like two bottles riding on a current. The river was semi-solid and denser than water, the darkest blue flesh marbled with little white threads and spinning red wheels of light. To her bare palm, the creature was warm enough to be pleasant and a little stubborn when shoved. A person could walk across its surface, but only for as long as the river cooperated. On a whim, it could liquefy. That's what the old videos showed. Whenever it wished, the river could engulf the pontoons and platform and then everybody on board. That grim prospect had to be in Rococo's mind too. Yet the man didn't hesitate to walk across the blueness and climb on board, practically running from one end to the other. Following warily, Mere found a wood-like platform edged with simple low rails. There were three cabins, each with a flat roof and its own walls, and one door that could be swung closed. And there was a fourth room with nothing inside but a toilet. The biggest shock was how planned everything was, functional and unadorned yet entirely useable, perhaps even comfortable.

What should the two of them offer in response? Praises and thanks, perhaps. With few hard threats against anyone who might try to set a trap. Rococo and Mere shared glances, trying to guess each other's mind.

Amund had reached the shoreline.

And the blue flesh rippled, pontoons rising up on newborn ridges. This must be how they would move. What wasn't a river would carry them on its wiggling skin, and what wasn't a river valley would pass on both sides. Mere didn't want to make guesses, much less fall for wrong speculations, but a sudden confidence shook away some of her doubts.

She looked at Amund again.

The mortal seemed to prefer the shore.

Like muscle, like people, a living river preferred to find easy routes. That's why their distributions resembled earthly rivers. Born in the sea, lazy flesh was pushed wherever the climbing was easiest, which meant following existing drainages. Living tissues absorbed rain and glacial melt as well as the minerals and every organic

treat. Each creature fed on an extraordinary range of energy sources. Sunlight and wild insects were food. Infrared radiation from the ground was food. But the most coveted meals were from beneath the ocean floor and the high mountains. Piezoelectric and geothermal. That's what delivered true, trustworthy power.

To Mere, this was a wonderland. Regardless of what life brought, death tomorrow or in another ten million years, she might never experience an entity so strangely remarkable as this.

That sounded like belief, didn't it?

She laughed to herself.

Rococo noticed, and for one reason or many, he laughed with her.

Then both looked at the shoreline, at Amund.

Was he going to balk at the ride? No. His hesitations ended with a few long steps across the river. Then he was standing beside them, saying nothing, letting the pack and kit fall to the deck, but breathing hard while staring at Mere.

Something was different, was wrong.

Possibilities offered themselves. Mere accepted none of them, but her intention was to flat-out ask their companion about his mood.

Except there wasn't time for questions.

Looking past both of them, Amund called out, "I'm ready."

The boat that wasn't a boat shivered.

"And I want this to be a quick trip," Amund commanded.

Suddenly the boat rose even higher, and they were streaking downstream.

Laughing, Rococo sounded like a nervous boy.

Mere felt warm and afraid.

Meanwhile the man in charge seemed to relish their reactions, stepping between them as a smile came and then faded again, a slight embarrassment offered with the hard words, "For the moment, both of you are under my protection."

What was this?

And the man in charge said, "Madam, I want you to know. I'm looking forward to sleeping with you."

\* \* \*

## 7

Leaving his homeworld, bound for duty aboard the Great Ship, the youngster envisioned his life as a sequence of long leaps through darkness, with spectacles and wonders waiting at the end.

That was a self-absorbed notion, and deserved. The Great Ship commanded respect as well as envy, and it was in the best interest of every world to enthrall the Ship's diplomats. As the ultimate tourist, Rococo was sure to be afforded every comfort, every grace. Standing on the windswept lip of an endless canyon, walking the sacred glen past the sacred desert, or, if the mood struck, riding what wasn't a whale into the depths of a frigid methane sea: Those were memorable events from his first thousand years.

But spectacle rises only so high. Even an intensely curious mind grows numb to vistas and symphonies and all of those rich, sweet stinks. And every grand majesty eventually becomes nothing but another good day.

Yet this living river . . .

The beast was like nothing else.

And their journey to the coast?

Without the high stakes, this voyage would have been momentous. But the perils

were close and impossible to forget. Amund, for instance. The man was dying. Age was murdering him, and the omnipresent radiation, and the capricious will of an alien had elevated him to a high, utterly ridiculous station. But for how long? Meanwhile the two immortals were stripped of every resource, nothing to aid them but considerable experience and the fact that one of them had survived worse disasters than this. Which was Mere. Rococo had never experienced any mission this harrowing. But why would he? Diplomats weren't explorers. The captains didn't toss his kind into shitstorms. And in particular, they wouldn't risk Rococo, one of their best. Not for an adventure with less than 2 percent chance of survival. Which was his estimate, weighing what he knew and what his guts said.

"Two percent," he mentioned to Mere.

She stared at the living river and the swiftly passing shoreline. Having outlived at least one world, he assumed she would generate a more optimistic number. But no, she surprised him.

With confidence, she said, "I don't know."

"It's an estimate," he allowed.

Then she warned him, "Guesses are just another danger." And on that cryptic note, she turned away, walking into the cabin that she was sharing with the dying man.

Rococo remained on the bow of what wasn't a boat. Boats were buoyant, but there was nothing to float on here. What wasn't a river carried them where it wished, and it was wishing them toward the ocean, usually at speeds that drove strong winds into his face. Everything in sight was one creature, a wonder of salt-infused gel and migrating impulses, bioelectric currents and free oxygen, plus reflexes and cross-purposed desires and whatever memories happened to have survived the recent nightmare. Unless every memory had endured, which was possible. Who knew? A field team and labs and AI savants running free. That's what they needed, and that was impossible. This river was safe from study, and a man riding the swift nonboat couldn't understand what he was seeing, much less appreciate what he couldn't see, and that was another reason why Rococo found himself spellbound.

The beast had grown wider and presumably much deeper over the last few days. More than three kilometers across, the blue-black gelatin appeared slick and dark and exceptionally nonreflective. Water always invited the sky, but this wasn't water. They rode on a ribbon of meat and reflex and furious power. And where true rivers were flat, this creature made itself tall, flexing into a ridge that carried tiny people and their tiny prison where it wanted, as quickly or as slowly as it wished. Now, for instance. Rococo felt the sudden change of direction. What wasn't a current swept him close to what wasn't a shoreline, and he stared at a scraggly false forest of sessile bodies waving long tendrils at him or at the sky. Maybe they were feeding on airborne plankton, or perhaps this was something else entirely. Watching the forest dance, he realized that the tip of each tendril was cracking like a whip. Bits of tissue were torn loose, and the bits rose high and then fell until wings sprouted and those new bodies flew away, dissolving into the thick alien sky.

Had he seen this before? Inside the videos sent by the original river, did Rococo ever observe this talent?

No.

A skill unleashed during the rebuilding phase? Rococo suspected Mere would feel just as ignorant as he did. No, there was a person to ask, but he was inside his cabin with his lover. This world didn't bother speaking to diplomats or exobiologists. Only Amund was given that honor, and only on the river's schedule. "Next time the two of you chat," Rococo should say. "Ask about the tendrils sprouting wings. Would you please?"

He smiled out of habit and held tight to the railing. The river had yanked itself as

high as ever, Rococo perched at the edge of what looked like a wet purple cliff, and that's when the sessile forest vanished. Busy life was instantly replaced with what looked like a dead city. Blockish shapes resembled buildings, and there were signs of fire that must have burned hotter as they continued downstream, the black outlines of foundations sketched on the blasted ground, and then long reaches of filthy irradiated glass. Cities were human inventions, and of course this world never had cities. But a facility must have stood here, a sprawling factory where the previous river refined metals and wove the antennae that spoke to the Great Ship, and maybe the bones of those early starships. Maybe this was an intentional side trip, one man shown the devastation wrought by some very bad thoughts. Or maybe this was all chance. Either way, the blast zone impressed him. Rococo estimated distances and the megatons, both of which were substantial. And then the glass vanished, the river spreading into a gelatinous purple lake inside a crater, and Rococo couldn't stop thinking about what a nuclear device would do to his tiny, perpetually scared mind.

Suddenly that 2 percent chance of survival felt wildly optimistic. He suffered that revelation and then embraced it. Freedom always came when the odds were at their worst. There was no getting off this world. The new river didn't trust them, and maimed as it was, it had enough power to demand whatever it believed was best, and that included ignoring the two creatures that could transform its future in the most amazing ways.

Holding his breath, Rococo listened to his thoughts.

Far out on the lake, the beast was pulling itself into what looked like a mountain, and then it lifted the prison and prisoners until they were at the summit, hundreds of meters above the land. That's when they stopped, and a great voice rose from below, shaking the world as it called out, "Amund."

A few moments passed before the naked man appeared, obviously interrupted from pleasures that didn't appreciate interruptions.

Rococo continued to hold his breath, his body tingling, alternate metabolisms waking as the last of his oxygen was spent.

Still naked, Amund hurried down the blue slope, and where nobody else could hear him, he paused, speaking a few words while waving his hands.

Mere emerged, wearing clothes and a watchful, unreadable expression.

Rococo breathed again.

The sugar inside his flesh began to burn, the tingling becoming a general warmth, and once again, his thoughts shifted. He wanted to speak to Mere. Honestly and unheard. But that meant using a tongue that the creature beneath them couldn't understand.

More breathing, more thinking.

The luddy continued to wave his hands, chatting happily with one of the largest creatures in the galaxy.

Rococo cleared his throat. "I'm thinking of that bal'tin proverb."

The bal'tin were familiar to both of them, and that included a language that this world couldn't have heard.

Mere stared at him.

Rococo offered a brief statement that sounded like music.

Straightening her back, the woman smiled and then let the smile fall away. This hadn't been a long meeting. Amund was already returning to the prison, marching uphill because his great friend wouldn't think of making the journey easy for aging legs. How much radiation was punching up from the lake floor? Probably quite a lot. The entire world was saturated with fallout, and Amund was halfway dead, and even if the cancers didn't kill him, it was only a matter of decades before he was finished.

With those bleak thoughts swirling, Rococo offered another bal'tin proverb. "Doom

and eggs, doom and eggs,” he sang. “Our souls are the boxes that carry forth the doom and the eggs.”

As he spoke, he realized that he was crying.

When did the tears start?

Rococo had never earned a warm smile from Mere. Until now. The tiny woman looked at him, offering a sigh while showing him such a delicious smile. She cared. She felt for him and for both of them. Perhaps she even thought about holding his hand. And there weren't enough sensors in the Universe to measure the pleasure that smile delivered to one old and very doomed diplomat.

\* \* \*

8

Some voices wanted Amund frozen. The streakship was being fueled and provisioned, and he had minutes to prepare for a quick trip to the Ship's port, and after that, a sudden introduction to his fellow crewmembers. But friends and strangers had to approach him before he left the Highlands. Using confident voices, they advised him to step inside a cold bottle. None of them had any firsthand experience with spaceflight, much less alien desires, but they promised that his life would be spared at the end of this adventure, and did he want to waste his youth living inside a streakship? His ex-lover was particularly adamant. The voyage was sure to be dull, and he really should freeze himself for both journeys, out and back again. But she didn't go so far as promising to wait for him, ludicrous as that would be. Instead she offered a fetching look, saying, “I'll have a daughter or two by then, and I know they'll be eager to meet the most famous human ever born in the Highlands.”

Those were the last human words spoken to Amund's face.

When he reached the Port Alpha, a few low-ranking machines took the trouble to offer the same advice. Deep space was full of obstacles. One shard of comet could slip past his streakship's defenses, and the impact would slow their trajectory by several hundred meters a second. And when that happened, the liquid bodies inside would continue forward at several hundred meters every second. Thrown against the walls, Amund would be turned into dead goo. Nobody wanted that. “Sleep through the journey out, enjoy a fine adventure on the target world, and then you're free of this ridiculous obligation,” they told him. “Another good sleep, get swaddled in kinetic buffers, and who's bigger than you when you come home?”

And all those pretty girls waiting, no doubt.

Amund listened to every word, but what he heard were the selfish fears: These machines didn't want their human wasted, and they certainly didn't want to lose the four new worlds that his tiny death was going to buy.

Washen never mentioned cold bottles, and perhaps she didn't know what her officers were suggesting. Her last moments with Amund were spent introducing the two-person crew, then with warm touches, reiterating her boundless appreciation for what one noble man was doing.

Rococo never brought up the topic of freezing anyone. What mattered was boasting about his infinite skills as a diplomat and how he would face down the rivers. “Saving a young man's life,” he said.

Except he didn't say, “Saving a graying, half-spent man's life.” Did he?

In a day jammed with the unforeseen, the greatest surprise was Mere. So tiny next to the captains and diplomats and everyone else. So plainly, ridiculously different. Amund didn't think of her as pretty, yet he couldn't stop staring at the little face that looked starved because it was starved. This body and those enormous bottomless

eyes were born on a crippled starship. Amund heard that story. With a rush of words, Rocco told how she crashed on an alien world where she was tormented like a demon and worshipped like a god. Mere was human only in the most glancing fashion . . . but wait, she wasn't human. Amund forgot what was obvious. This was another immortal machine who couldn't be trusted. Those wrong eyes were full of sympathy, or she was pretending to care. Either way, she offered very few words. No talk about cold bottles or her thanks for his sacrifice or even the particulars of the mission. She just took hold of him, her hand hot and his hand suddenly feeling cold. Mere gripped him just enough to prove her unnatural strength, and then she smiled in the saddest fashion, confessing, "I like very little about this mission. Just so you understand."

Mere wasn't beautiful, but gods didn't have to wear beauty. It was enough that they were powerful, ageless entities deserving adoration and long stares, and any mortal would be stupid not to be thrilled to live in their shadows.

The low-ranking machines were the ones that argued for the cold bottle. Those would-be deities were scrambling for anything that smelled like power. "We're going to save you," they promised. As if they had any role in future events. "A kidney, a hand. You give the rivers a gift, and they let the rest of you return home again. You won't be half a year older, and then you're the young hero leading your people to the new world."

How simple/stupid did they think he was?

"No bottles," he told them emphatically, and just once. The entities had perfect recall, after all. Let them remember the words and his blatant scorn. "I'm going to live a few years, and then I'll die one way or another," he said. "But you're not fooling me into hope. Because there isn't any hope. And that's the same for all of you. Machines don't run forever, no matter how much you try to fool yourselves."

\* \* \*

The voyage proved even more grueling than expected. Regardless of painkillers and cushions, the hard acceleration made Amund ache, and each new day was desperate to repeat every day that came before. The ship's mess could generate any food, but he usually ate the same reliable meals. He knew where he would lie down and what he would think about when he let his mind wander, and for those early months, Amund thought about ex-lovers and the cavern that had seemed so tiny until he came to live here.

Those left-behind people were obviously thinking about him. Good wishes kept arriving, and there were some elaborate, intimate messages buried among the clichés. Responding to everybody was tedious, and he gave up that chore soon enough. But a few people received his thanks along with observations about a dreary life inside a machine-infested closet, and sure enough, that honesty helped diminish the inflow until a week might pass without noise from home.

One of the later messages was memorable. A girl who Amund had never met sent him a long video of herself. She resembled Mere, undersized and big-eyed. But she was also a child through and through, and a youngster's enthusiasm was on display. Grinning, she told him that she had studied the river's video very closely, the same video shown to everybody in the Highland. She realized that Amund saw only a few moments before he ran downstairs to volunteer. "Everybody knows your story," she said. But the rest of the video was far, far more impressive. "Don't you think so?" Of course the living rivers weren't rivers. They were more like trees, and the bulk of every tree was hidden underground. The dense, supersalted gel didn't stop at the ocean. The aliens reached across the continental shelves after rising from the depths, and they glowed as they moved, feeding on volcanic seams and microbes and sunlight brought from above. That was the spectacle worth seeing. Not the ordinary business on land, but on the ocean floor. That was what she would see, if she could. And she only hoped that Amund had time and the opportunity to experience that

very wonderful paradise for himself.

Amund had never bothered to watch the full video. Inspired by the enthusiasm, he took the challenge and felt impressed, but not as awed as his new friend sounded. No, she was what impressed him. “You seem like such a bright, excited person,” he told her in his reply. “My advice? Get the fuck out of that cavern. Go out and live anywhere else that will take you.”

That message went home, and after that, nobody called to him.

Which was perhaps what Amund wanted all along.

\* \* \*

It was impossible to guess what his companions would talk about on any day, or even inside a single minute. Topics varied widely, crazily, often shifting in mid-sentence. But Amund knew that he wouldn't understand much, and the subjects' importance would evade him. Yet that ridiculous noise became a reliable joy in a small, painful life. Two gods shooting the shit, and sometimes, now and again, offering up words that fascinated the human in their midst.

Those gods weren't having sex. But Rococo's lust was aimed at Mere's blatant indifference, and his frustration was another reliable joy.

Maybe all that would change when they reached the rivers. An entire world as their playground and out of sight of the doomed man, the gods would take their pleasures by any and all means. Imagining sex with Mere. That was another trusted pleasure. She was a wise god who didn't want Rococo, and of course she didn't have desires for a mortal beast like Amund. Mere had lived happily among aliens. She even married a few of them. This female deity seemed capable of any perversion, which meant that she was saving herself for the rivers. Her next husband was a ten thousand kilometer ribbon, and how could anything as small and ordinary as Rococo feel reason to be optimistic? But freed from hope, Amund could spin endless fantasies about the god-machine.

Not a terrible fate, all in all.

Then the rivers started to murder each other. An entire world was burning, and that's when Amund honestly contemplated the cold bottle. Suspend his life, and with him unaware, they would land beside the first streakship. That vessel was safe enough, protected by hyperfiber and aggressive banks of defensive lasers—two features missing from their minimal ship. Frozen, Amund would endure one kind of dreamless nonexistence, and if he woke again, they would be approaching the Great Ship, most of his life left to be lived.

Except he never mentioned the bottle.

And the others didn't offer.

The following times were interesting and awful. Morning began with breakfast and premonitions of disaster. A comet shard was about to strike their thin, low-mass hull. Amund knew it, and later, he was equally sure that a nuclear weapon would meet them. The sense of doom gave each moment its spark, and every minute crossed felt like victory. And the human was surprisingly fond of this new life, fear churning emotions while his thoughts kept bending in fresh, peculiar ways. He didn't waste neurons dwelling on bottles or his left-behind life. It was an endless, secret joy to stretch out on the padded mattress, watching gods struggle with events beyond their control, maybe beyond their understanding.

One hundred million kilometers out, Mere looked at him and then looked away, telling the wall, “Bottle time.”

Bombs and the need to make hard maneuvers left no choice. Amund had to be frozen and wrapped in protective garb, then loaded with the rest of the essentials inside the crash vault. He was one kind of dead when the ship suffered a string of attacks, and then the vault was on the ground and the hyperfiber door was blown

clear. The defrosting took hours, his last breath still inside the soft pink lungs. Alien air was allowed past preset filters, and a wardrobe of smart clothing swaddled him, helping lift his temperature to happy human norms.

A fiercely hot hand touched his forehead. A mother's gesture, and Amund recoiled. Mere said his name.

"Who?" he asked.

The vast eyes blinked, startled.

"Who are you?" he asked.

But he couldn't fool the tiny god. She laughed, warming him with her gentle pleasure. Then with a minimum of sentences and a few hopeful nods of her head, she explained what had to be done if they were going to survive.

"Wait," Amund interrupted.

She stopped talking.

"The old deal is shit, isn't it?"

"And there's no good reason to slaughter you," she teased.

Rococo was standing close but not standing with them. The man obviously wanted to add his genius to the conversation, but he managed to keep his machine tongue quiet.

"If we go home," Amund said to Mere.

"If," she agreed.

"I want to ride inside the bottle."

"With the rest of your days ahead," Rococo interjected.

The man was unlikable. But Amund nodded as if those were the wisest words ever spoken, and then he did what he had never done before. One of his cold hands reached out, touching smooth hot skin and the very sharp cheekbones of a face that couldn't be more amazing.

"That's not why," he told Mere.

"No?" she asked.

"No," he confessed. "I just want the chance to stop thinking about you."

\* \* \*

## 9

"I'm looking forward to sleeping with you."

Those words were buried inside the noise about protecting them. But having said them, Amund didn't repeat himself, not even in the most tangential, cursory fashion. That first night, after their kit provided dinner, the three of them sat on the open deck. Nobody spoke. The only noise was the groaning and creaking of the giant beneath them. Amund never mentioned sleeping arrangements. Mere watched the tired face and the man's bent posture, noticing how the left hand rubbed the right elbow. That joint was giving him trouble. Arthritis, perhaps. The backpack was heavy, yet he had carried it down to the river. The kit could synthesize any substance, and that's why she opened the pack and verbally walked it through a menu of archaic compounds. Pink tabs of salicylic acid and sugar were delivered, and Mere studied the mortal once again. A creature of water and passion, and so far removed from simple.

The medicine remained inside her tiny hand.

Standing, Mere said nothing. From the corner of an eye, she saw Rococo watching her slow walk. Maybe Amund watched her, too. She didn't look back at the man. She was done trying to decipher him.

The sun was nearly set when she entered the cabin that Amund had already chosen. His boots were waiting inside the door, self-cleaned and new heels generated for

the next hike. The room was dark and felt small and smelled a little like blood agar. She left the door open. A woven bed was waiting in the back corner, the mattress pulpy and soft and just a little damp, and it would be awful sleeping. Mere wondered if she could ask their protector to speak to the river, give the creature a little helpful instruction about making people comfortable.

Entering the cabin, Amund was greeted by soft laughter.

To the blackness, he said, "Hello."

"Here," she answered.

He closed the door, and that was all he did for the time being. Standing opposite her, Amund was breathing loudly enough to be heard over the creaking river. The lack of windows did nothing to isolate them. Every motion beneath them was felt, the twitches and shivers and the rising sensation as they were carried aloft, accelerating downstream. Mere shivered out of fatigue and fear, and then she laughed once again, louder this time.

"What's funny?" Amund asked.

He still stood beside the closed door. Two thin lines of starlight managed to slip past. Mere's eyes had totally adapted, but mortals had lousy night vision. And Amund wasn't young anymore.

"You and the river," she said. "The two of you were having a conversation on the hillside."

Her companion shifted his weight from one leg to the other.

"While we were being useless, you and it were achieving important diplomatic overtures."

"She."

"Okay. She."

Amund took one blind step forward.

"I have something for you," Mere said.

The river shuddered and creaked, but the larger sound was a deep breath being taken and then held.

"Medicine," she said. "For your elbow."

"Is that what you did in the kit?"

"Yes."

Amund didn't speak.

"What did you think I was doing?"

"Making poison," he said. "Or some kind of madness pill. You know. So you can enslave my will and all."

Interesting, paranoid ideas.

"I wish I'd thought of that," she said.

Amund broke out laughing, but not for long and not hard. Then he crossed the room until his feet blindly hit hers.

"Sorry," he said.

"For what part of this?"

The man sat beside Mere, but a good deal of the bed was between them. "She and I talked, sure. She told me what she thinks about you. And Rococo. She was ready to kill both of you, just as soon as she thought of the best way."

"But you stopped her."

He didn't respond.

"You saved us."

He sighed. "Apparently so."

"Hold out your hand," Mere said.

Amund reached for the voice, and she grabbed his hand with her empty hand. His skin was cool and damp, rather like the bed was cool and damp. But she suspected

that Amund would make a far more comfortable mattress.

Mere held three of his fingers inside her five.

He pulled back until he felt pressure, and then he relaxed.

"If I say, 'No,' to sex," she said.

He said, "Well."

He said nothing.

"Open your mouth," she said.

His face was in profile, and in that very poor light Mere saw the mouth obey her command, his entire body alert and blind and very hopeful.

She dropped two pills onto the tongue.

"Sweet," he said.

"You're right, it's poison," she said. "And it takes only forty years to work."

Then Amund was laughing and not quietly. He laughed until he sobbed, and Mere wasn't certain when she began to chuckle at some of this or all of this.

Sitting like that, they stayed awake half the night, gradually moving closer on the unappealing mattress, and Mere kept hold of those three fingers while both of them pulled reasons to laugh out of nothing at all.

\* \* \*

## 10

Amund was making love to one god when a second god called to him. He didn't dress or bother to let his erection die. A happy fleck of naked water, he hurried off to speak with the river. This would be a pivotal conversation. He had that sense from the beginning, and the human felt a little omniscient when his premonition came true. Among her many promises, the river claimed that they would reach the coast tomorrow, around midday, and the waiting streakship wasn't far beyond the horizon. Great news was heaped on top of great news. Amund practiced what he would say first and next and last. Returning to the nonboat, the human was wishing that smiles could be infinite. How enormous would his face and mouth have to be to capture this transcendent joy? Then he noticed the two gods standing behind the railing. They watched him, and Amund let his finite face drop for a moment, watching his bare feet crossing the blue flesh. Then he looked up again. Mere and Rococo were standing close to one another, perhaps a little closer than before. Amund was still in an exceptionally good mood, and Mere was smiling too. But at Rococo, and not just politely smiling.

Humans, genuine mortal humans, were less than brilliant. But even ordinary middle-aged men had the innate genius to find the meaning in faces. Amund looked at those faces. Tenderness and acceptance and a new chain of possibilities were on display, and he saw the future. Those two machines were going to sleep together. Suddenly the highest, frothiest portions of Amund's joy were being shaved away. That was what the revelation did to him. Amund was jubilant and then he wasn't. He was the pinnacle of history for untold billions, and then without losing that gift, he became another lover for a woman who might have a thousand husbands before her life and soul were obliterated on some alien world.

Amund didn't know what to do next. He felt as if he was watching himself finish the walk, one hand grabbing the railing and his body climbing onboard with as much grace as possible, each piece of him acting of its own accord. He was responsible for nothing, including what he said to the others. "A pleasant day," his voice allowed. But not Amund. Amund was a ghost trapped behind the flesh and behind the words, as surprised as anyone when he entered the toilet room and closed the door, one hand

and then the other slowly rubbing the face that still couldn't put an end to the endless smile.

Three minutes, and he stepped back into the sun.

Rococo was standing at the bow. The nonboat was moving again, sliding down a long slope fast enough that the machine had to tilt a little bit forward, leaning against the wind. But Mere had disappeared. Amund looked in her cabin first, but she wasn't there. What if she was waiting inside Rococo's cabin? That's what Amund saw, in his mind. She was lying on Rococo's bed, waiting for a god, which was exactly what she deserved. Amund waited for jealousy to take hold. He was hoping for ugly emotions, something to give the next moments even more importance. But even when he was convinced that Mere had abandoned him, he couldn't find any useful anger or need for vengeance.

To himself, he muttered, "What makes a god?"

Power, vast and deadly but also capable of great accomplishments.

Amund pushed open the door of his cabin. Mere had returned to bed, and she was naked again. What had been her clothes had formed blankets across the damp, fleshy mattress. She smiled at Amund and sat up a little more, starting to speak and then thinking better of it. What did she notice in his face? Probably more than he would ever tease out of her face.

"Four gods," he said.

She blinked. "What's that?"

"Sorry. Nothing." Amund offered the apology. But he meant it. Four gods were present, but it just so happened that one of the deities had only a few hours remaining, and then he would be nothing but a mortal man again.

The nonboat twisted slightly, and sunlight fell through the open and over the naked woman. So scrawny, so odd. She was a stick with tiny breasts and the wrong eyes, and Amund wondered why he had ever cared so much about sex with that creature. Then in the next instant, he wanted to throw himself on top of her and take her until he was exhausted. Which was what he should do, he told himself. Because this could well be the last time for this sort of fun.

"Come outside," he heard himself saying.

Mere tilted her head, those eyes gaining a slightly different perspective.

Then he added, "I have news," and still naked, he walked to the bow, claiming a patch of the deck where he was close to Rococo.

How much did he hate this man?

Not nearly enough, he decided.

But that didn't mean there weren't good reasons for what was going to happen. That's why Amund didn't wait for Mere to dress and join them. He looked at a face that never changed, and feeling a smile building, he told the face and the machine behind it, "There's a new agreement. In place of that old, lost treaty of yours. That's what I've been doing these last days."

The surprise seemed genuine, suspicions tagging along behind.

"A new agreement," the diplomat repeated.

"But not for four worlds," Amund said. "I convinced the river to agree to give us full rights to both hot worlds and the original two ice moons, plus twelve other moons. And one gas giant. Which is pretty useless in the short term. But maybe someday. And also, I've won the right for the colonists to bid on this system's Oort, if someday they ever want to do that."

Rococo opened his mouth.

One word emerged.

"Good," he said.

"It is," Amund agreed.

Mere was clothed and emerging from the cabin.

Amund continued. "And by colonists, I mean humans. Mortals. Nothing but. This solar system is and will always be a sanctuary for luddies, whether they're human or big ribbons of living gel."

Rococo said, "Oh." Then his natural poise took charge, and he said, "Goddamn impressive, sir."

"Sir," he said.

Mere was close but the wind was blowing, and what could she hear?

Amund leaned against the man, his mouth next to Rococo's ear. And that was when he said, "Oh, and the river still needs its sacrifice. And she left it up to me to choose which one of us gets the honor."

\* \* \*

## 11

Rococo was friendly with three former luddies, a fourth was an out-and-out enemy, and there was a fifth luddy who he met while she was still a child. Apparently he made an impression, because two decades later, having decided to leave the faith, she asked this important immortal to accompany her to a facility that did nothing but transform her kind into his kind.

"I want to live and live and live," she claimed, holding her companion's knee. "But can I confess what scares me?"

"That you'll grow bored," Rococo said.

She was startled until she stepped outside herself. Then she laughed, admitting, "That's the cliché, I suppose. Lives always become tiresome, and ten thousand years leaves a girl empty and dull."

"That's what some people want to believe," he said. "But then again, luddies need every reason to think themselves right. No matter how much of a lie that reason happens to be."

"So you don't feel bored."

Rococo winked at her, and with a happy voice said, "They won't tell you. The luddies who want to keep you small. But that thing you call boredom? It doesn't exist. Not for my kind. Monotony and apathy are symptoms of a weak mind, not a condition that afflicts those with too much time. For us, life is furiously rich. With our memories and our big eye for detail, it's very difficult to keep us from being enthusiastically involved in every facet of the day. Every breath and good thought and the little pains too. Which are almost never large pains, by the way. Every circumstance is another fascinating element inside a grand parade that doesn't need to stop for any reason short of death."

His friend went through the necessary surgeries and rebirth, and unlike a few patients, she quickly adapted to her new state. And fifty years later, while Rococo was leading a distant mission, he received news that his friend died in a tragic accident involving plasmas and AI errors.

The two of them were never lovers. Yet the woman was first in his thoughts that evening, and she stayed with Rococo throughout the sleepless night. Long stretches of conversation came to mind, word for word, and there were intervals where memory was far larger than the present. Once again, Rococo was sharing a drink with a perpetually young lady who was throwing her new cognitive skills at new languages and exotic faiths, all while touring exotic corners of the Great Ship. She was also making friends and then throwing the same friends aside when they proved to be the wrong sorts for a girl who was preparing for the next million years.

“A million years,” she said.

Night had reached its middle, and Rococo sat on the deck, in the open. Sometimes he looked at stars, sometimes down at his empty hands. But all he saw was a girl who was so thrilled, standing on the edge of Forever, and all she was asking from the Universe was a brief million years.

Three times, Mere came to him in the night. The first two visits proved nothing but that the man didn't want to speak to her, regardless of what she said. But that didn't stop her from explaining that Amund was a shit. He was a shit who should have told them what was happening, even if the river forbade any warnings. “He could have used the Highland language to keep us ready. I learned enough words to follow the topic. If he had thought about doing that, which he would have. If the shit had ever bothered to try.”

Shrugs didn't capture Rococo's indifference.

Silently gazing at the back of his hands. That's what convinced her to walk away. Twice.

Somewhat more effective was the third visit. With the sun rising behind them, Mere sat on the deck, legs crossed, near enough to Rococo that they might bump knees. With a careful quick voice, she said, “Of course it's possible that everything is a lie.”

He looked at her, looked away. “About a sacrifice.”

She nodded.

“And he's the one who decides who.”

This time, Mere glanced at her own hands. Waiting him out, apparently.

Finally, Rococo said, “I believe the man.”

“Why?”

“Because I don't know him,” he explained.

Face and mouth both asked, “What do you mean?”

“I mean that if I did know the man, then I'd be able to yank the fabrications from the truth. For instance, if I'd slept with the fellow. Then I'd have a perspective. Then maybe I wouldn't feel as if I'm guessing about everything.”

“Everything,” she repeated.

“Including this alleged agreement,” he said. “We don't know if this world has offered worlds to us, much less tossing us most of the solar system. And how can we be sure that luddies are the only organisms that are welcome here? We have no details. We have nothing but words and posturing from a creature that you don't know either. Do you, Mere?”

“Not particularly well,” she said.

The sun was suddenly bright and wonderfully warm, baking into his flesh. “All right,” Rococo said. Then after a long pause, he added, “I'm going through the morning as a doomed man. All right? That's how I want to approach my last day, even if it isn't today. All right.”

\* \* \*

When they reached the ocean, the river had built itself into a towering blue-black wave. Five hundred meters above the surface of any normal river, they were being shoved forward so fast that the air blasted past them. But Rococo remained outside. Stress or habit was at play, or maybe the absence of imagination that comes with the gallows. The man could do nothing but watch the ocean retreating before the gelatin wall and before him. What wasn't calmness had come into him, or maybe this quiet had always been present, in secret. Being someone who was always loud or ready to become loud, he didn't know the tricks about lasting silence. But he was trying to learn. How much time remained? Don't calculate that. The best trick was to do nothing but sit and watch everything at once, committing nothing to memory because nothing was more useless now than fresh remembrances. Not for Rococo, not any-

more. Just sit still and merge with each breath and the glorious sight of saltwater fleeing from a giant that was bearing him faster and faster toward their destination.

There.

The streakship was waiting exactly where it was expected, where it promised. Thick legs straddled an island that had sunk into the waves, just from its terrific mass. Where the destroyed streakship had been minimal hyperfiber and maximum vacuum, this beast was a marvel of deep armor and utter indifference to its surroundings. It was a bright gray cone that could have hidden happily inside a mountain range. It was a machine that would welcome them and protect them, and if the resident AIs were tweaked just so, the ship would fall in love with each of them, probably forever.

"What if Amund was lying?"

Rococo said it to the wind or himself, or maybe no one. Maybe the wind was talking to him, or the river had marshaled the words, perfectly mimicking how Rococo sounded to himself.

Either way, the hope was offered, and an instant later, it died.

Amund never explicitly said, "I'll have you killed." Because that was such an obvious answer. But what if the river and this world didn't think that Rococo was enough of a sacrifice? If these entities didn't approve of immortals, maybe Mere was on the platter, too. Which meant that Amund could step alone into the streakship, and being the only surviving member of this awful mission, he would easily take charge.

These ideas needed time to bake, except there was no time.

Rococo saw quite a lot, but most of his focus was on the gray cone trying to stand above the onslaught of flesh and vengeful rage.

When he stood, he stood quickly, putting his back to the wind. The pack and kit were secured to the deck's middle. Rococo claimed both and entered his cabin, opened the pack and gave instructions. Was this request too detailed, too odd? Was he wasting valuable time? But no, Remoras had built the kit, and Remoras designed wondrous machines. A sculpture of pure carbon—the narrow diamond blade and an elaborate, bone-shaped graphite hilt not meant to fit any human hand, but useful enough for a man about to commit murder.

The streakship was minutes away, and the towering wave decided to slow itself, beginning a steady, graceful collapse.

Rococo stepped inside Amund's cabin. Sitting on the mattress, legs too stiff to be crossed, the mortal body was wearing comfortable clothes without boots. For a moment, nothing happened. The man looked as if he might rise any moment, or he might close his eyes and nap. But then the bal'tin ceremonial knife caught the sunlight, flashing like a beacon, and Amund responded with a sudden sound. A laugh, or perhaps something else. It could have been a sob, a muddled word, or maybe just some miserable noise escaping on its own.

Rococo managed two steps before his legs quit working, before both hands failed him and the weapon struck the floor.

Softly, one of them said, "Do what you want."

Whose voice was that? Rococo wasn't certain, and he didn't care. What mattered was that he had done nothing wrong. He was bringing his colleague a fancy memento, and no crimes were being attempted, nothing was behind him but an open door and sunshine.

Except Rococo had said, "Do what you want."

"Thanks for the advice," the other man said. "I'll try to do just that."

Retreat began with a small step, then a pause. Embarrassment took hold, forcing Rococo to drop his eyes.

Amund pulled in his legs and rose, both arms helping fight gravity. Then he

stepped close, saying, “You’re the great diplomat. And so smart, too. If I believed half of what you’ve told me, I’d have no choice but to consider you one of the most brilliant creatures ever born from circuits and salt.”

Rococo looked up, finding hard eyes and a broad grin that quickly turned into an ugly, disgusted expression.

“You’re the genius,” Amund said. “So of course you realized the truth. Probably long ago.”

“What truth?”

“Well, that the rivers, and I mean all of the rivers, have been playing a spectacular game with us.”

“Game?” Rococo muttered.

“Or don’t you see it?” Laughter bubbled out of him, but the man’s expression remained cold, furious. “When the rivers first learned about you, millions of tiny immortal machines riding inside one giant machine, they were afraid. Disasters were looming. Maybe like never before, they spoke to one another. They asked what they could do to save themselves. And after consideration and hard debate, they decided to send you promises. Four worlds offered, and three of those worlds were dedicated to the machines. Except they never wanted you on their shoreline. That’s why they demanded someone like me. One pure river. And after a lot of hard, invisible preparations, they staged a terrible war between stubborn beliefs.”

“Staged,” Rococo echoed.

“Be honest,” Amund said. “Bad as this damage looks, how many rivers were killed? Zero. That’s how many. Each creature is diminished, yes. But still enormous compared to little us. And then they attacked our ship, stripping our resources to a desperate minimum. But of course that should have bothered a genius like you. Against tremendous odds, you survived. So did I. We lived because that was the plan, and then the river spoke to me. Which was the main reason why I was invited in the first place. To negotiate.”

Rococo had no voice.

“The rivers were hoping I’d settle for four worlds, the same as you did. But I saw the game and held out for quite a lot more. Which is why I have to thank you. Half of my life listening to you chatter about how great you were at your job, and I learned a few things. Stupid as I am, I still managed a treaty guaranteeing that these aliens will be surrounded by billions of pure rivers but very few machines.”

Rococo couldn’t remember his last breath. Through clenched teeth, he asked, “And I’ll be the sacrifice?”

“No, I am,” Amund said instantly, without regrets. “I always have been. Aren’t you paying attention?” Then he stepped close and bent just low enough to grab up the knife, holding it sideways on two flattened hands while adding, “You’re not the great diplomat. They pulled a con on you. From the start and without you suspecting. And here I am, the dreamy piece of water that saw what you couldn’t even imagine.”

The knife weighed nothing, and the flesh offered no resistance when the tip went inside the man’s stomach and out again.

Amund collapsed, letting out a long scream.

A tiny portion of the sunlight was blocked when Mere ran inside, grabbing Rococo’s hands. “What are you doing, why would you?” she was asking. “How does this help anything anyone anywhere . . . ?”

She was carving up her own fingers, trying to yank the diamond blade free of his grip. But Rococo wouldn’t let go. Feeling nothing and hearing nothing, his mind was focused only on the idea that if he was very good, and very lucky, only a million years would have to pass before this woman would willingly touch him again.

Three weeks after the streakship launched, bound for the Great Ship, the AI doctors pronounced Amund well enough to travel. His stitches hadn't healed completely, and the scar tissue would never vanish. But those problems were bearable, and at least his guts were back where they belonged.

Besides, there was too much to do.

Amund was always the sacrifice. The one lie that he told was that he had any choice in this matter. But there wasn't going to be a staged event full of fake religious noise. The culmination of change and age and his own willingness to continue: That was why he would die. His flesh had nowhere to go but to join with the rivers, and these creatures were older and far more patient than any captain or clerk wandering long among the stars.

Along with the AI doctors, Mere had left behind portions of the streakship's machine shop and enough raw material to build a fleet of reasonably mindless devices. And following his instructions, a submarine was built and ready.

The river still listened to him, but it wasn't talking back anymore. Which was understandable. Honestly, what more could be said at this point?

Amund stepped inside the submarine and asked to be moved. No engines were necessary. The ship supplied breath and clear windows and spotlights. But those lights weren't needed. That was obvious soon after the river pulled him under the surf. The blue flesh of the land was replaced by glowing white flesh that lit the water and Amund's face and his great wide smile. The entire day was spent crossing the continental shelf, and then the edge came and the river set him where he could see the spectacle. A great current was crawling its way out of the depths. A waterfall flowing backward, milky and brilliant and vast. The world was shaking as the river pulled its reserves out of the abyssal plain: The first surge of an invasion that would rebuild the planet in less time than it would take this one man to die of old age.

How many people were able to watch a new world made?

Everybody could, of course.

But at the end of the day, how many ever took notice?

---

"I have been told and told and told that I have more stories published in Asimov's than anyone else. I accept this as true. But Robert Reed, the author, is someone else. I'm just the fellow who likes to play with thought problems and human nature, and for more than two decades, I have felt fortunate to have this magazine as a home. Best wishes on your fortieth."

—Robert Reed