Nancy Jane Moore



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For everyone who stares at the sky on a starry night and wonders who else lives in the universe.

Prologue

I

A small girl—maybe five years old—walks along a pedestrian lane in Demeter, the main city on the asteroid Ceres. Her left hand is firmly attached to her father; her right trails along the handrail, and she wears gravity boots. She is not native to Ceres and will not be there long, so she needs the boots most of the time to counteract the muscle decay that comes from living on a low-gravity asteroid. She doesn't argue about the boots, although they are clumsy and ugly and she much prefers the sensation of floating around she gets without them: her daddy told her to wear them, and she always obeys her daddy.

The father who walks beside her is not a tall man, but he has wide shoulders and powerful legs. His hand dwarfs his daughter's, but he holds hers gently. His skin is light brown, as is his daughter's, though her face shows more traces of Asian heritage than his. He, too, wears gravity boots, but they look less clunky on his feet and go better with his Marine uniform than they do with her shorts and t-shirt.

As they walk down the street—it's their first visit into the city since they arrived at the military base two days ago—several Ceresians float by. They use the handrails to pull themselves along. They are young people, their hair cut and dyed in the furthest extremes of this year's fashions, their bodies showing implants chosen with care to shock their elders, their legs dangling. Their feet are bare, the toes curled under.

"Look, Daddy," the little girl says, staring in fascination. "Aliens."

Her daddy laughs. "No, honey. They are people, just like us. They just aren't wearing their boots right now." She isn't old enough to be told the whole story: that these people have adapted to the low gravity and their muscles have atrophied. In some ways, the father muses, they are becoming a new species. But that's too complex for a five-year-old, who means "non-human intelligent life forms" when she says aliens, even if she doesn't know it yet.

The child is disappointed. She very much wanted to see aliens. She tells her father—in that deadly serious tone young children use when they've figured out something important and need to educate their parents—"Someday I'm going to meet aliens."

And her father—to his credit—does not say, "There's no such thing as aliens." He says, "You bet you will, Caty. You bet you will."

Π

On the fourth planet from a bright yellow star, a being sits staring at a small pane of ground glass, watching the night sky. Stars and planets abound: the night is clear, as it often is on this planet.

The pattern is a bit blurred. The being holds the piece of glass firmly with two hands, reaches down with a third hand, and up with a fourth, adjusting two knobs. The focus improves; the image clears.

The being recognizes the layout of the stars and planets, for it has watched this sky many times, knows the different ways it looks at the different times of the year. In one corner of the sky, it sees something that moves, something that does not belong. It watches the object for a while, notes its path and trajectory, and then sits quietly, eyes closed, in deep concentration, reaching out to others in the weave.

As the being sits, a younger one comes into the room and climbs into its lap. This one looks like the telescope watcher in miniature: both are covered in fur evoking the pale gold of dawn

or sunset. The first one does not open its eyes as the newcomer wiggles around to make itself comfortable, though it strokes the small one as a parent strokes a child.

The small one leans over the ground glass. The object that does not belong is still there, moving across the sky. From the child's mind flow images of fantastic beings: wide fat things, with no arms or legs; horned creatures twice as tall as any being ever seen.

The father is amused by these images. It strokes the child again, untangling a knot in its fur. But it can feel nothing from the sky object, and neither can the others with whom it is connected. Nothing with a mind. Nothing alive.

A debate—of sorts—begins to rage within the weave. An image of some kind of beings—like them but not like them—sending the object. Another one of rocks and matter, nothing tied to life. A protest that this object appears different from the meteors and bits of asteroid that they know. And from the small one—insistently—constant images of unusual beings, each one more improbable than the last. The debate continues without resolution.

A last image is introduced, one out of ancient history: many objects similar to the one in the night sky and beings landing, creatures that look neither like them nor like anything in the child's imagination.

The child can feel the adults' fear, but is more excited than afraid. Other worlds exist beyond this place; other beings populate the universe. Then and there it resolves to meet these others one day.

The father is engrossed in the discussion of what should be done, but spares a moment for the child's thoughts. And pats the small one gently, encouragingly, as if to say, yes, my dear one, yes, you will.

BEFORE

1

Sanjuro was heading for a post-work drink when her com sounded. The Colonel said, "Sanjuro, we've got a riot in progress in Demeter. I need your company in the city fifteen minutes ago."

The war on Ceres was supposed to be over. The rebel leadership had surrendered a month ago. Some mop-up remained, but that was work for peacekeepers and military police, not combat marines. An Army peacekeeping division with an MP component had recently been deployed across Ceres and the smaller asteroids of the Belt. About half the marines who'd fought here were already gone, and Caty Sanjuro's company had been doing routine standby work at the small base a few klicks outside Demeter for the past two weeks. The base—a small facility set up for low-grav training that had become the surface headquarters—was gradually shrinking to its pre-war size, with most of the temporary structures removed. Their next orders were supposed to be for home and some down time.

"Excuse me, sir," Sanjuro said. "But isn't that an MP assignment?" Before Ceres, she'd have simply said, "Yes, sir" and hit allcall to get her people together. But this war had altered her in ways she'd never thought possible. Combat always affects people—killing leaves few human beings unscathed, despite the violence that permeates history—but before this operation she'd always been able to put her job in context. Sometimes there were no good choices; sometimes war, ugly as it was, beat the alternatives. This time, though, she felt like she'd been fighting on the wrong side.

The Colonel said, "You're reinforcements. There's only a small force of MPs in Demeter, and they're still struggling with the low grav. The whole thing's veering out of control. They need backup. I'm sending details now."

That wasn't as much information as she wanted, but the tone of the Colonel's voice made it clear that the Q&A period had expired. "Yes, sir," she said, and hit all-call.

Sanjuro looked out at her company. They were packed in the briefing room. Like most buildings on Ceres, the ones on the Marine base were made from local rock. They might have been nice if they'd had windows and been painted something other than utilitarian grey, but those in charge had deemed artificial light more practical, given the short lengths of Ceresian days and nights. The lousy decor added to the feeling of depression that had settled over her troops—seasoned fighters all, but sick of this war. No professional soldier likes fighting amateurs, particularly amateurs who believe in their mission. More than one of her people was struggling with the same conflicted emotions she felt. She knew these people, knew the last thing they wanted was to deal with was a riot.

Sanjuro needed to inspire them, and she needed to do it quickly. So she said, "The Army can't hack it."

"So what's new?" someone yelled out. Someone else said something Sanjuro couldn't quite catch that drew loud laughs. She didn't have to hear it to know it was at the Army's expense.

She said, "The MPs they put in Demeter don't even know how to handle a riot."

More laughter.

"They need marines."

That drew a few cheers.

"We're the closest backup, and they know we can do the job."

"You bet we can," somebody said, and there were more cheers.

"Anybody got a question? No? Get your armor on. I want you on the transport in five minutes."

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"Good job," Lt. Gloria Elizando said as she and Sanjuro left the troops to their sergeants and moved into a private room to suit up. "You almost got me to cheering, too. But then I remembered we were going out to deal with a fucking riot, which is not supposed to be our job." She grabbed her hands behind her back and leaned forward to stretch. "Kuso! I'd hoped we'd seen the last of battle armor for a while."

The armor was a metal-cloth alloy, flexible, but a lot heavier than the heat-regulating graphene body skels they wore on ordinary duty. It was worth the extra weight—it would block most projectile weapons, diminish the effect of explosives, and, when the headgear was in use, filter out gas—but no one liked wearing it.

"Me, too." Until the captain had been shot, she and Glory Elizando had each run a platoon, but now Sanjuro was technically in charge of the whole thing. Six months' worth of seniority had given her the nod, but Elizando hadn't resented it. They got along okay.

Even in uniform they didn't look alike: Elizando exceptionally tall, with dark brown skin and bright gold hair, Sanjuro short only by comparison, with thick black hair, light tan skin, and the wide Japanese eyes that went with her name. Her father had insisted she use her late mother's name.

"Guess this is why they left us on the base, instead of moving us up to the station," Sanjuro said.

"Too bad they didn't leave one of the other companies down here." Actually, they both preferred being on the surface. Being on the station that moved in geosynchronous orbit around Ceres meant making polite with the brass, and both of them had the line officer's contempt for those who made battle decisions from afar.

The transports ran on mag-lev lines between the base and Demeter. They were utilitarian, but at least they had windows. Through the mild distortion of the arched cover that encased the transport line, Sanjuro could see sunshine filtering through the mass of tree-like plants that covered all parts of the asteroid that weren't under a dome. The astrobiologists said those gene-modded plants would give Ceres a breathable atmosphere so that people

wouldn't have to live in sealed domes forever. Once that change happened, more settlements would be built, and eventually the workers who'd completely adapted would be able to make real lives here. Another fifty years, the biologists said—soon, but not soon enough for the people taking part in the riot.

Sanjuro knew the history, but until she'd arrived on the asteroid she hadn't thought much about it one way or the other. The war on Ceres had started as a miners' strike, and workers in the Asteroid Belt's other main industry—tourism—soon joined in. No one had expected two such diverse groups to get together. The miners were people who couldn't pass exams for most types of work, while the tourist workers included the kind of thrill seekers who liked to lead extreme expeditions as well as aspiring actors who flocked to the Belt's low-grav theme parks. But, as it turned out, they had key things in common—poor pay, safety issues, and atrophied muscles that kept them stuck in the Belt.

When she'd been a kid, Sanjuro's dad had run low-grav training at the base for a couple of years, so she knew that most longterm workers sooner or later stopped doing the exercises that kept their muscles in shape for higher gravity. Their hours were long, the exercises took lots of time, and most found their work easier to do if they adapted completely to low gravity. Unlike the Marine brass—who simply ordered their people to the do the exercises—company execs weren't displeased if their workers didn't bother. Lack of muscle definition meant they had no place else to go.

The strike was illegal—the contracts that got workers the fare to the Belt prohibited unions along with requiring people to work for their initial company for a set number of years. The Ceres government, at the request of the corporations, sent local soldiers out to break it. Some of the local troops were retired members of the systemwide Combined Forces run by the Solar System Union, but most were soldier wannabes who couldn't pass the exams for enlistment in the interplanetary forces. A small troop, they had only one advantage over the strikers: weapons. They broke the picket lines. The strike ended, but the leaders quietly began to organize something more deadly. Two years later they announced their resurgence with a bomb attack at the adventure park on Vesta. Killing tourists got them labeled as terrorists, and allowed the Ceresian government to ask for SSU military help. Combined Forces sent in marines— Sanjuro and her people had come in with the first division. One division hadn't been enough, and more people soon joined them.

The outcome had never been in doubt—the rebels couldn't get their hands on enough money or weapons to win—but nothing about it had been easy. A year of effort had brought the war more or less to a halt, but the cost in lives and injuries had exceeded projections by over a hundred percent. Every time Sanjuro looked at her troops, she remembered the ones who weren't there.

Sanjuro's father, Jake Horner, had died on one of the outlying asteroids. He shouldn't have even been out there. He was in his early sixties, the highest ranking enlisted marine on Ceres, and his assignment was admin. But the colonel in charge wanted to be a general. When he got intel that some of the rebels were holed up on that rock, he'd led a raid, bringing along Horner and some other experienced troops as a squad. It had been a trap—a mine buried deep inside had taken all of them out along with the asteroid itself.

Confusion greeted Sanjuro's troops as the company poured into the former corporate offices that served as military headquarters in the city. Like the buildings on the base, the structure was a series of interconnected domes made from local soil and rock. But the walls were painted bright yellow. It might have even looked cheerful, if the windows hadn't been occluded and the room rearranged to serve as a command center.

"Dios, I'm glad you're here," said the captain who appeared to be in charge. He was staring at a holographic projection of the city outside. A line of words flashing in red drew Sanjuro's eye to the key in the upper left hand corner of the holo: "True Visibility at 5%." The image itself was crystal clear, showing a mass of rioters

running in all directions, with soldiers bouncing around trying to keep order. A couple of soldiers were hunched over workstations, probably running the holo.

"We got a bomb threat at the high school about fifteen minutes ago," the Captain said. "I sent the bomb squad over to check it out, and now I can't raise them on com or get a scan reading. Meanwhile we've got one hell of a situation out in Governor's Circle, so I can't pull any people out of there." The Captain's headgear was open, and his right eye kept twitching.

"What's going on in the Circle?"

"Rioters everywhere. We used gas, but they must have been expecting it, because they just keep coming." He waved his hand at the projection, which did, indeed, show people constantly materializing. Or rather, a simulation of that—they were running a comp program based on scan data, Sanjuro realized. The Captain saw the look she gave it and said, "Vid's not working. The gas made it bad enough, but then the rioters set off some smoke bombs. You can't see a thing out there except by using scan. And since everything doesn't register on scan, we thought we'd better get the comp to run some projections."

Great, Sanjuro thought. Made-up data.

"I've got three squads out there trying to round people up, plus one in the council building protecting the politicos. But the baka Ceresians just move too fast."

Four squads should be enough, Sanjuro thought. "How many rioters are there?"

The incredulity Sanjuro felt must have been obvious, because the Captain's reply sounded defensive. "Probably about a thousand." He waved at the projection again. "We're real short-staffed. Everyone figured any trouble would hit the mines, not downtown Demeter. We've just got a company of MPs down here, plus the bomb squad."

Sanjuro looked at Elizando. The bomb threat at the high school was probably a hoax, but nothing was certain in this kind of chaos. Adult rioters probably wouldn't target the school, but kids might. "We better check out the school," Sanjuro said to Elizando. "Take one squad over there—leave me the rest."

"Right." Elizando gave an order and a dozen people headed for the doors. Sanjuro hit com. "And Glory, stay in touch, okay?"

"Yes, ma'am." Her tone wasn't quite sarcastic.

"Who's in charge out there?" Sanjuro asked the Captain.

"I'm trying to run things from here," he said. "Usually it's better when I can see the big picture."

"Well, tell your people we're on our way. And make sure you let us know what you see."

The rest of the company moved out at the lope that was standard fast pace on Ceres. It made them look like a troupe of oversize ballet dancers doing a series of grand jetés. Most people picked up the lope fairly quickly; it took longer to figure out how to turn or stop. Sanjuro's company had spent close to a year on Ceres; they knew how to move.

Demeter, like most domed cities, had been laid out in circles rather than right angles. Governor's Circle was the city's only real park; open space came at a premium. The council chambers—another series of interconnected domes—were the main buildings on the circle. Other government buildings took up about half the circle's circumference, with the rest of the space given over to high-end retail and upscale offices. Even an outpost like Ceres has an upper class.

Sanjuro wondered why the Army hadn't called in the troops at the mines. They weren't as close as the Marine base, but they could still get here fast. She let the thought slip away; right now her attention had to be on her job. By her reading of scan, there were considerably fewer than a thousand rioters out there; the Army Captain's comp projection had distorted the situation, even if some rioters weren't registering. The readout showed MPs foundering around, trying to catch Ceresians and falling as they turned too fast or reached out too far. They bounced back up just as fast, but by then the Ceresians were gone. The MPs' actions lacked rhyme or reason.

Even her people couldn't move as fast as the Ceresians. The only way to develop perfect movement on a low-grav world was to give up high-grav muscle definition. "Circle your people around in the passways one block off the park," she told her sergeants. "Once we control the perimeter, we'll trap the protestors in front of the Council building. I'm going to check in with the Army people holed up in there, see if I can get their people organized so that they're helping rather than hindering. Keep your weapons on disable. Doesn't seem to be anything more vicious than rocks out there." Though a few people probably had something more lethal. They always did. "And no more gas. There's way too much of it now."

She ducked into the Council building the back way, reassured the sentry who blocked her path that the Marines had come to save his ass, and found a full squad in the front part of the building, where a barricade with gun turrets had been erected during the war. This wasn't the first battle for Governor's Circle. A lieutenant paced around behind them, alternately checking scan and com.

"Lieutenant, you've got more people than you need in here," Sanjuro said, not bothering with the niceties of introduction. "Two sharpshooters can keep the front steps clear. We need to put all the troops we can out on the streets to round these people up."

"Who...oh, you're the marine the Captain said was on her way. I don't know if we can—"

"I do. Put your two best shooters there, and there"—she pointed—"and get the rest of them out on the streets. We'll hook 'em up with my sergeants out there; they'll know how to position them. Hell, you'd think you people never dealt with a riot before."

"We haven't," the Lieutenant said. "Most everybody in this company is fresh out of training. All the experienced troops are over at the mines. Nobody expected—"

"Anything to happen in Demeter. So I've heard. Well, let's try to fix this mess so that your first riot won't be your last one."

The Lieutenant stared at her. She didn't have her headgear on, so Sanjuro could see the tension in her face. She hesitated for a few seconds and then used vocal on her com. "Captain, the marines say we can hold this building with a small force, so I'm sending most of my people out to help with the round up." A pause. "Yes, sir." She turned to Sanjuro again, "He says we might as well follow your directions, because nothing else is working."

"A real vote of confidence," Sanjuro said, without bothering to hide her sarcasm. "Let's get moving." She headed out the back door, into the block behind the chambers.

It was slow going. The borrowed soldiers stumbled as they moved. Sanjuro wondered what all these inexperienced troops were doing here. Surely the Combined Forces brass had known they'd need peacekeepers and MPs once the war was won. With all the hot spots on Earth, the Army had to have plenty of people with substantial post-war mop-up experience. They could have sent some of the pros for low-grav training six months ago and had the right people here.

Relying on scan was becoming a real pain in the ass, especially since it didn't seem to be registering an accurate number of rioters. Even granted that Ceresians moved fast, the constant up and down of the numbers couldn't be right. But as near as Sanjuro could guess, given the state of her data, most of the rioters were actually in the Circle, not on the side streets.

Sanjuro sent the soldiers around to the blocks outside the park to mix in with her marines, and pulled the MPs who were roaming around inside the Circle back out to the edges. The maneuver took longer than she wanted, but after fifteen minutes she had the perimeter, with troops spaced evenly around. Now all they had to do was walk in, herding protesters as they went. It ought to work. They moved toward the Circle.

Com beeped. Elizando. "Hey, Sanjuro, we're at the high school. Looks copacetic. Bomb squad found nothing. Hardly anybody here anyway—looks like the kids are all out your way. Teachers, too, probably."

"Great. Come on back. We could use the help." Elizando didn't answer.

"Glory? Elizando, stay online." No response. "Come on, Glory, talk to me." She tried their private channel. Still no response. "Oh kuso." She hit all-call. "I've lost Elizando on com. Is everyone else here?"

The reassuring sound of voices reporting in was interrupted by a thundering explosion that momentarily deafened her. She switched from local to wide area scan, and saw red alert alarms about where the high school ought to be. Double kuso. Without com there was no way to know if Elizando's squad was outside the damage area—and therefore able to bring things under control—or blown to Pluto with the building.

The Army Captain's voice was hysterical as it came over com. "The school blew up."

"I know, Captain. It was hard to miss. Stay calm," Sanjuro told him. Her own mind was racing. Should she pull everyone out of here and head for the high school? That didn't feel like the right choice, but she couldn't figure out why. Go on your instinct, Sanjuro, she told herself. She spoke to the Captain. "Send someone over to the school area and find out what's going on."

"I don't have anyone to send."

"Pull one of those people off your sims. They're not doing us any good. Or go yourself. We have to know what's up, and I need to get this situation under control."

She continued leading her troops in. Rioters screamed and cursed, and threw rocks and worse at them. The smoke began to clear in spots, showing her angry people waving signs, nothing more. Their faces were contorted, and they were screaming and throwing things, but they were moving forward under the pressure of the armed soldiers. Sanjuro's people could get this under control, assuming that whatever had happened at the school didn't ignite more trouble.

A fresh wave of gas blew across the protestors. "Goddamn it," Sanjuro said, "whoever set that off is looking at a court martial." Now she couldn't see anything again. She called up scan, and the number of enemies doubled before her eyes. Damn it, scan had to be malfunctioning. Otherwise, where had those people come from?

Sergeant Begay's voice came through com in a shout. "The new ones got live weapons, Captain." She heard shots ring out, saw flashes register on scan. Somebody screamed through com, and the sound almost pierced her eardrum. If the sound came through com, the screamer had to be one of hers.

It didn't make sense. Another scream. More explosions nearby. She knew they'd never caught all the rebel leaders, had never rounded up all their weaponry. If her people were screaming, somebody had to be firing armor-piercing rounds. Something still felt wrong, felt off, and she didn't trust scan, but she'd run out of time. She brought up all-call. "Reset your weapons for kill. Fire on any target firing at you." That last point was a brief curtsy in the direction of standard operating procedures; she knew damn well that once they started firing live rounds people would be shot regardless of whether they were holding rifles, rocks, or babies. But she couldn't let her people die without fighting back.

Sanjuro reset her own weapon and fired in the direction of one of the flashes. Eighty-odd troops let loose a barrage. She began to hear lots of screaming from the people in front of her. She realized she wasn't hearing any more screams through com.

Begay's voice again boomed through all-call. "Stop the firing. Tell them to stop, Captain, tell them to stop." His voice cracked. "Scan's wrong. They aren't armed. Stop the firing. Please stop it."

Her scan was still registering enemy fire, but she had been in too many battles with him to distrust Begay. "Cease fire," she said, repeating the words as she moved toward Begay's location until she heard the shooting taper off, stop. "Sergeant, what's happening?" She stumbled on something, recovered, leaped over it, and then turned back. On the ground lay a teenager. His eyes were wide open, but he stared at nothing. The gaping hole in his chest told her all she needed to know.

Begay said in her ear, "Scan lied." He was crying.

Sanjuro left the boy's body, thankful to get away, and connected up with Begay. He knelt in the street, cradling the head of a dead man. The deceased had the same kind of broad, brown face as the Sergeant. She put a hand on Begay's shoulder.

"Madre de Dios, we killed civilians." The Sergeant wasn't even trying to stop his tears.

Sanjuro knew how he felt. Com buzzed in her ear. "Captain, Lt. Elizando sent me over to tell you that things are fine at the school. We've got some kind of com glitch." Another voice cut in, "Captain, I got to the school and everything's fine there. Nothing blew. I don't know what the explosion was, but nothing blew. Just some kind of com problem. I had to come back halfway to get through."

The explosion. She hadn't felt it; just heard it. Probably through com, now that she thought about it. It had been so loud she'd assumed it was an outside noise, but something that big should have shaken the ground. She called up the Army Captain back at the Combined Forces headquarters. "Captain, get medical out here on the double."

"But scan's still showing—"

"Scan's chingado, Captain. Along with everything else. We don't have anything out here except dead and dying civilians. Get medical here now."