

Deeds of the Night

Chapter 1

An apostate. He tasted the word, got used to it. Was that how the others saw him? The first gamma-ray-burst *refusenik*? A disbeliever?

They could go to hell.

The sun had ducked under the horizon, but it still tossed out thick bundles of light, like a market vendor just before closing time. Ten for two. Everything half off.

He pulled one of the big metal doors to the side and shoved a wooden crate over to the opening. The crate was too low to be comfortable for a man of his height. On the other hand, the view was perfect. He sat down on the hard crate and folded his arms over his knees. Always the same place. Always the same time.

After sundown. Just before nightfall.

He patted his pocket to make sure he'd remembered his cigarettes.

A few hundred meters below, the clouds lay like a smooth blanket, glowing red and orange. "The gorgeous wavelengths", as his daughter called them. He sized up the fluffy clusters of water vapor with a practiced eye. The wind's buoyancy versus the vapor's mass. Pressure and counter-pressure. The clouds would hold their place.

He checked his watch. A few seconds left. Then the round building would slowly begin turning on its axis, precisely as he had set it to.

And he would be on the world's most fantastic carousel ride.

Slowly the other observatories would glide past him. The most beautiful buildings on this planet. White and shiny silver, round and square. They would all lay there, shining below him on the mountain ridge in the lush light of sundown.

Soon. Soon.

He ran his hand through his short gray hair and lit his first cigarette.

Three minutes per round.

For nine long minutes he would feel that he could turn back the hands of time. That nothing was too late.

He knew it was naive. He just couldn't help it.

The building shook, a jolt of expectation surged inside him. Metal grated against metal.

Here we go.

The landscape slowly began sliding by. The same panorama as always, and yet totally new.

He recognized every small overhang, every bush poking out of this perfect mountain 2400 meters above sea level, the third-best location on this planet for astronomers. The Atacama desert in Chile, Mount Kea on Hawaii, then here, this mountaintop on La Palma, one of the Canary Islands. High enough that the clouds seldom blocked the view. Not much wind, little turbulence that could disturb observations. Dark nights.

Of course there were minuses. Sand from the Sahara blew onto the island once in a while, whirling up the mountain and coming to rest on the mirror. The fine grains of sand made it more difficult to see the light from stars and galaxies. The darkness wasn't as total as it once had been, either. The cities had grown.

And then there were the Spaniards.

He smiled wryly. They'd found a solution to that problem. At least for the time being. But now their Spanish hosts meant business. The price had risen. Those people and their damn pride. Large mirror, small results. An ugly combination for Spanish vanity.

On the other hand. Without the Spanish *machismo* he wouldn't be sitting here. He had no illusions. The Spaniards were the least of his problems.

The view had shifted from the flaming sea of clouds where the mountainside plummeted to the waters, to a hilly landscape bathed in golden red. White, gleaming buildings appeared in his field of vision.

His Danish colleagues, however.

He knew that they knew. The stony look in their eyes. The stiff nods. Wasting time was the one sin they could never forgive.

And that was precisely what he was doing up here.

Wasting time.

Once a month he sat in one of the world's finest observatories, stocked with equipment worth millions, and used valuable time on nothing.

Or almost nothing.

He completed the obligatory tasks with a minimum of care. Two minutes and a few polite remarks. That was all his shady enterprise demanded of him.

The rest of the time he spent dreaming.

Or looking at Venus. Not at Mars, which attracted all the headlines and grants. Not at distant galaxies, where stars had been born in the time before time. But at Venus. Earth's closest neighbor.

So close.

This particular telescope was ideal for the purpose. The mirror could be tilted to an almost vertical position, which permitted it to catch light from Venus, even when it was only a few degrees over the horizon. The evening star. The morning star.

Meaningless names. Venus wasn't a star. Venus was a planet. In spite of that, he too called it a star, in his heart. Morning star. Evening star.

The building had now rotated one hundred eighty degrees. Twenty tons of metal, cement, telescope, mirror, and computers, all turning. All solely for his amusement.

Below him, a bird of prey soared on its wings. He knew that ruthless struggles were playing out in the twilight amid the stony cliffs and dry bushes. The kings of daylight were now ceding all power to the overlords of night.

Soon it would be too dark for the buzzards and kestrels to see, and their prey would belong to the owls. Bats would conquer the airspace, while crows and songbirds would retreat to the firs farther down the mountain. Cicadas would fall silent. Lizards seek shelter.

Meanwhile he would just be spinning around.

Round and around in a world bristling with change. From day to night. From light to darkness. From hot to cold.

He had granted himself three rounds. Spintime. Dreamtime.

The others had given up on him. They just didn't know what to do. Not as long as he took care of his special job. The one the others wouldn't touch.

White, gleaming buildings slid into his field of vision again. Inside, the English, Italians, Belgians, and Dutch were preparing for their night's work. He knew their procedures. Soon they would open the domes and position the telescopes and adjust the mirrors; they had already filled the instruments with liquid nitrogen to keep them cold. They had checked filters, inspected lenses, verified the positions of stars and galaxies, and entered the initial commands in their computers.

Now they sat and waited. For the dark.

Most of them would be jittery, anxious – would this be the night they would see something unexpected? A surprising variation in a double star. A slight skew in a distant galaxy's calculated trajectory. Something that would reveal an entirely new pattern? They would squirm in their office chairs, nervous, making small talk.

As he once had done. A long time ago.

He was back to the steep side of the mountain. The cloud layer below him was a metallic color, a pinkish-rose. All the cloud tufts and waves were highlighted from the slanting sunlight; the cloud cover appear solid, as if you could walk out on it. Another illusion of solidity. He smiled. He knew exactly when his career had ended. When the fire in him died out.

He didn't realize it as it was happening. But afterwards he knew, the exact date.

They had been searching for gamma ray bursts, GRB's. Danish astrophysicists, along with the rest of the world. That's how it seemed to him. To *them*.

For weeks, months on end, nothing happened. Then they came, one after the other. Three GRB's in a row.

March 23, March 24, March 28.

Night after night they had worked their tails off, dizzy from exhaustion, caught between anticipation of a breakthrough and fear of making mistakes. They had observed, gathered data, analyzed, gathered new data. At last the weekend came, and everyone went home to get some sleep. Or so they thought.

The alarm went off again. The signal came from the HETE-2 satellite, their ever-vigilant scout in space. They had hurled themselves back into work. And they had pulled it off.

Dazed from lack of sleep, overwrought, feverish. They'd pulled it off.

In the hours that followed, they found the afterglow from a GRB that was closer to Earth than any they had ever seen. A unique opportunity. With red eyes and frazzled nerves they continued to measure and think and calculate and cram some of the world's fastest computers with brand-new data.

It had taken them a week. And they'd done it.

They had broken the code to the most violent events in the universe since the Big Bang.

His team proved that the core of a giant star can collapse and hurl its outer layers into space in a gargantuan explosion, a final soundless scream.

His group pointed out the connection between supernovas and gamma ray bursts.

His researchers brought new knowledge about the universe down to humans.

He could still recall that feeling. The triumph. The victory. The fire.

And then it was all over. For him.

Later they made new discoveries. Found new GRB's. Bigger GRB's. They had stared so long into space and so far back in time that they approached the birth of the universe.

He didn't care.

One day he realized it, he knew. That his life was now a before and after. That he himself was a dying star, apart from the fact that he didn't explode; he faded away. And that he was all right with it.

Only his intelligence and experience and a massive use of PhD students' labor had kept him going. He had published. He had gotten his grants.

But the others knew. And soon it would end.

As soon as the Spanish problem was taken care of, he would get out. He would spend his time with his family. Devote himself to what was close at hand. His own cosmos. Touch his wife's hair and his grandchild's fingers. Maybe he should buy an amateur telescope and start staring at the moon?

He smiled at the thought, took a last drag on the cigarette; they seemed to taste better up here in the thin air. He would admire the moon's craters and stare spellbound at its rugged surface, like some pimply schoolboy.

Outside, the sun and the clouds were in their final embrace, an extravaganza of gold and purple.

He heard a noise, and he turned his head.

Unexpected steps pierced through the clatter of the building and the hum of the cooling equipment.

"Oh. It's you!" he said, and he turned away quickly to hide his irritation. Why could he never have a moment's peace? He was busy, was that really so hard to see?

He barely registered the blow to the back of his head.

He was unconscious when he was pushed out through the opening. He felt nothing when he landed several meters below, on the narrow metal grating that served as a walkway around the observatory. He didn't hear the sound of the building as it continued to rotate. Or of the iron stairway approaching.

Had he been conscious he would have sent an urgent appeal up to Venus, pleading for the stairway's sensors to work. He would have reminded her that the building and the walkway rested on separate foundations. That the walkway remained fixed and motionless, also when the building rotated. And that the stairway was welded to the building.

Venus, evening star, would understand.

Venus, morning star, would save him.

He loved this Nordic observatory at the peak of a foreign mountain. He had taken care of it. Admired it and protected it. It would be so viciously unjust if, of all buildings, this one should be his death.

He would have begged Venus to intervene. Stop the building. Stop the stairway. Before it crushed everything in its path.

But he wasn't conscious.

Therefore he didn't send a final plea for help when the stairway reached his foot.

And Venus couldn't help him.