

Bomb Scare

by Vernor Vinge

*Of cruel monsters we might say,
"...and a little child shall lead them."*

Prince Lal e'Dorvik dilated his mouth hole, and casually picked at pointy fangs. With great deliberation he inspected the sky: the Maelstrom glittered across fifty degrees, a spiral of silver mist. Its brilliance was dimmed by the gibbous blue planet that hung near the zenith. That blue light flooded through the transparent hull section onto the formal gardens of the Imperial Dorvik flagwagon. The soft brown sand dunes of the gardens were transformed into rolling blue carpets. An occasional ornamental lizard scurried across the sands. Within his vision, Prince Lal could see no less than five shrub-cacti: the excess vegetation made the since almost sickeningly lush. Except for the bluish tinge of the landscape, Lal could almost imagine that he was back at Home in his winter palace.

With feigned nonchalance he turned to look at his companion, Grand General Harl e'Kraft. Prince Lal was thought harsh, in a civilization where the execution of ten thousand soldiers was considered moral-building discipline. Now he moved obliquely toward the subject at hand-with his reputation, he could afford to speak softly. "Is it always night?"

"Yes, Puissance, we keep the wagon oriented with the sun beneath the gardens' horizon. Of course, I could make a 'sunrise.' It would take less than fifteen minutes to turn the wagon..."

"Oh, don't bother," Lal responded smoothly. "I was just wondering what the 'super-sun' looks like." He glanced at the blue-green planet high in the sky. "Isn't it theoretically impossible for a giant star to have a planetary system?"

The young general sniffed warily at the bait. "Well, yes. Stars this size never develop solar systems by condensation. This one was probably formed by the accidental capture of three planets from some other system. Such things must be very rare, but we're bound to come across them eventually."

"Ah yes, there shouldn't be planets here, yet there are. And these planets are inhabited by an intelligent, technologically developed race. And we must have these 'improbable' planets as the industrial base for our expansion in this volume; yet we don't have them."

Lal paused, then struck with reptilian ferocity. "*Why not?*"

For a moment Harl sat frozen by the other's ophidian glare. With a visible effort he twitched his mouth hole open in a disarming smile. "Care for a milvak, Puissance?" He motioned to a shallow dish of hors d'oeuvres.

Lal had to admit that the general was a cool one. Though e'Kraft faced the Long Dying for his failure, he offered his superior candied meat rather than explanations. This was going to be interesting. He carefully spread one of the squirming milvaks with a wrist talon, and sank his fangs into the little mammal's hairless skin. With a sucking sound, he drained the animal of its vital fluids.

Harl e'Kraft waited politely until Lal had finished, then handed him a pack of color photographs.

"The Mush faces are every bit as developed as you say. Their two outer worlds could supply us for any further expansion we might desire in Volume 095. They--"

Prince Lal slithered into a more comfortable position on the resting rack, and glanced at the top

photograph. Mush-faces: that was an appropriate name for them. The olive skinned monster that looked out of the photo seemed bloated, diseased.

"... Have not invented mass-energy converters, but they do use a very efficient form of hydrogen fusion for their spacecraft. Their biggest spacewagons mass more than thirty thousand tons."

Not bad for hydrogen fusion drive, thought Lal. He glanced at the next picture. It was a schematic of a Mush-face battlewagon. There was a typical cigar shape of a fusion-powered craft, the magnetic venturis taking up much of the rear volume of the wagon. Then rocket bombs were housed forward, with more snuggling under the craft's nose on outside racks.

"In one respect they are ahead of us technologically." Harl paused, then said slowly, "The Mush-faces can shield against our mass-energy converters."

This remark would have been greeted by a look of stupefied amazement if Lal's spies had not briefed him beforehand.

Lal's thirty times great-grandfather, Ghrishnak I, had conquered three oases on Home by edge of sword. His twenty-one times great-grandfather launched the first rockets into orbit, and perfected the hydrogen bomb for use against a group of heretics in the South Polar Sands. But the sword, gunpowder, steam, even the hydrogen bomb, all these were as nothing before the mass-energy converter. It was a simple weapon in practice: place the converter at the proper distance from a target, turn it on, and any desired fraction of the target was changed directly into energy. If such a weapon could be shielded against, the Dorvik had lost one of their trump dice.

E'Kraft continued, "This effect is probably incidental. Since the Mush-faces don't have converters, it seems unlikely that they could intentional design a defense against them. In any case, the only way we can destroy their craft is to convert a substantial amount of mass to energy just *outside* their screens. In other words we are reduced to using rocket bombs.

"They have an anatomical advantage, too, Puissance. A Mush-face can survive more than five times the acceleration that a Dorvik can. This mobility combined with their thousand gravity rocket bombs makes their space force more than a nuisance.

"Puissance, we have done as much damage as we dare to their industrial centers. It has not broken their will. Until we gain absolute control of local space, there will be no conquest." The general's statement was blunt, almost defiant.

Lal could imagine the tine enemy craft flashing through the Dorvik fighter screen and firing rocket bombs at the Dorvik battlewagons. From the general's own account as well as Lal's spies, it was obvious that e'Kraft had made the best of a terrible situation. Supreme tactical skill was necessary to survive an enemy with longer legs and better defenses than one's own. He riffled through the rest of the photographs. They showed proposed modifications in the Dorvik reconnaissance skimmers, for use as self-propelled bombs. Lal's race hadn't used rocket bombs in three centuries, so now that they needed them, such weapons were unavailable.

When Lal finally spoke, his face and tone contained nothing complimentary. "So these pus-filled creatures are too stubborn for you? Your view is just too narrow, General." He pulled an ornamented slate from his waist pouch. "That sickeningly blue planet," Lal waved at the brilliant object directly overhead, "has twenty percent of the population and only three percent of the industry in this solar system. Its destruction would hardly impair the system's usefulness to us. This"--he gestured with the triangular slate--"is an order, signed by my father. It directs you to detonate this planet."

E'Kraft's tympanic membranes paled.

Prince Lal hissed gently, "You find this overly violent?"

"Y-yes." The general was still blunt.

"Perhaps, but that is the point. You will convert one trillionth of one percent of the planet's mass. The explosion will be so vast that it will gently scorch portions of the other two planets. The deed's very essence is violence and brutality; it will show this race that further resistance would be worse than any surrender." Lal recited several stanzas from the liturgy of Dominance, finishing with:

"Ours is all that is and we rule all those who be,
For we are the Dorvik, the sons of the Sands.
And to those who deny our rule we say:
Bow down--or *be not*"

"It is immaterial whether you believe this doggerel garbage. The point is, that by divine authority or not, our race must stay on top. The day we take second place in the universe will be the beginning of the end for the Dorvik. If through some weakness of spirit we fail to conquer this system, then we will be consigning ourselves to the museums of the future just as surely as if we were destroyed in battle."

In a single fluid motion, Lal reached out from his resting rack and handed his subordinate the order.

"Implement this at once. And be sure you don't annihilate more than the mass fraction specified, else this whole solar system might be destroyed."

"I'm quite acquainted..." e'Kraft was prevented from digging himself a grave by the appearance of one of his aides. The man's three-dimensional image flickered, then steadied.

"Puisseance, General." The aide bowed to Lal and then to e'Kraft. "Thirteen seconds ago we detected a gravitic disturbance near the sun. Someone has entered the system."

"So!" Lal fumed. When he got his talons into the insubordinate wretch that dared enter the combat zone without prior announcement--

The aide continued excitedly, "Puisseance, it doesn't respond to our IFF. It's not one of ours."

Prince Lal turned sharply to Harl. "Could the Mush-faces be experimenting with interstellar drive?"

Unlikely, Puisseance. The largest mass they've ever assembled in free fall was less than one hundred thousand tons. The smallest drive unit we have masses more than a billion."

That was the Dorvik's other trump. Without mass-energy converters, it was essentially impossible to hoist a drive unit into orbit, where it could operate.

The aide turned to look at someone outside of pickup range, and his excitement changed to pale and groveling terror. "The intruder is exactly one kill-radius from... from the sun!"

To convert a star-Lal gasped. While he had been ordering the destruction of a single inhabited planet, someone--something--absolutely evil had fused a bomb to murder a galaxy.

It *was*, where an instant before nothing had been.

At one kill-radius from the primary, harsh white sunlight reflected blindingly off the little ovoid, all but blotting out the intricate gamma colored designs that covered its surface.

Two creatures sat within the apparition. Considering the variety possible in this universe, they looked much like the Dorvik. A closer examination by someone trained and clever might have revealed a trimness and efficiency in the intruder's structure that was missing from the Dorvik—that is missing from any natural race. For the intruder's race had supervised its own evolution for more than 1000,000 years. The result might not be remarkable in appearance, but the brains housed in those bodies were far quicker, far more subtle than anything unaided natural selection could produce. And though their grosser emotions were perhaps intelligible, any conversation presented here verges on falsehood in its incompleteness.

One of the creatures—identifiable by the two bristly spikes that grew tangentially from its head—turned to the other and said, in effect, "I still want S Doradus."

"Gyrd, this star is almost as big. And quite a bit easier to reach, too." The creature paused, adjusted the controls somehow. "Figuring the jump back is going to take all my concentration, so you'll have to cancel the relative velocity on the converter when we drop it."

The first replied. "No one tells me what do to, Arn."

An air of hostility just short of physical violence filled the tiny cabin. Then Gyrd submitted with a nod.

"That's better." Arn relaxed. "Just imagine all the maggots that will fry in the fire we're going to set."

Lal broke the awful silence. "How far away is this object?"

"Twelve billion kilometers, Puissance. We won't be able to detect it by electromagnetic means for another ten hours."

"How long would it take to compute a jump to its location?"

The aide did some fast figuring. "If we use everything, including our tactical computers, about ten minutes."

"Very well, put everything you have on the problem. We'll jump one of our battlewagons."

"Yes, Puissance--"

"But, Puissance, what about the Mush-faces? If we don't use the tactical computers for minimal defense, they'll tear our fleet apart."

Lal scarcely hesitated. "We'll have to take those losses. If we can't stop that... thing... near the sun, we'll all be dead anyway and the Dorvik empire will be destroyed in less than ten centuries." He noticed that the aide was still waiting nervously. Lal turned to the man's image and shrilled, "*Move!*" The aide bowed spastically and the image vanished.

The prince struggled to bring his voice back into control. "General, evacuate one of your battlewagons. We'll annihilate its entire mass right next to the Enemy." His emphasis capitalized the word; the Mush-faces were merely an enemy.

"Yes, Puissance."

"Ten minutes."

Harl nodded, began giving orders on his private comm. In the presence of a member of the Imperial Family he was reduced to the status of a messenger boy.

Lal had given his orders, and now had to endure a small eternity as they were executed. Somewhere he knew mountainous computers were ticking away at the calculations involved in even the shortest jump. Somewhere else, ten thousand men were trying to abandon their battle wagon before the deadline he had set. And somewhere, twelve billion kilometers away, was an object that had to be destroyed else the galaxy would die.

A brilliant red star appeared just above the garden's pseudo-horizon. The dot expanded, becoming fainter as it grew, the mad red eye of a monster. Almost simultaneously, three closely spaced red "starts" shone just two degrees away from the first. Lal recognized the characteristic glow of fusion bombs. The Mush-faces must have discovered that the Darvik defense patterns were no longer adaptive. Without tactical computers, the Dorvik were squatting milvaks before the attack. Those bombs couldn't have been closer than 100,000 kilometers, but the enemy was moving in.

"Enemy rocket bomb at fifty thousand kilometers and closing," said a disembodied voice.

Lal strained for some glimpse of the enemy. he noticed the silvery crescent of another Dorvik battlewagon some two hundred kilometers away, but that was all.

Both men sat in the flagwagon's Imperial gardens and counted their last seconds.

A white glare lit the gardens. Lal looked up, startled. The battlewagon he had noticed before had fired its rockets and now moved slowly across the sky. The brilliance of its jets brought temporary daylight to the gardens.

"It won't work," Harl whispered.

But somehow it did. The feeble-minded rocketbomb accepted the other battle wagon as its target of opportunity, and the garden's curving crystal walls turned opaque as the wagon's screens powered up. When the walls cleared, the other wagon was gone: ten thousand men and the gross annual product of an entire continent had been vaporized in less than a millisecond.

General e'Kraft's fangs clattered together with suppressed emotion. To lose men in war was expected, but to sit defenselessly and let an enemy destroy you with inferior weapons was nightmare. Abruptly he looked up, as if listening to some private voice. "Puissance, the crew of the *Vengeance* have removed to the *Sword of Alkra*."

Several more red dots appeared near the zenith, but Lal ignored them. The fleet would have to hold together just a little longer...

The aide reappeared. "Computations complete, Puissance. Just tell us which bat--"

"The *Vengeance*. As soon as the jump is made and you are sure the Enemy is nearby, annihilate the entire mass of the wagon."

Lal's urgency was conveyed to the other man, who vanished without even bowing.

Harl said something on his private circuit, and a flat image appeared before them. "That's from a camera aboard the *Vengeance*. It's transmitting by gravitic means, so we'll be able to see everything up to the detonation."

The picture showed the Maelstrom with the Mush-faces' planet off to one side. Abruptly the blue planet vanished. Startled, Lal glanced up and saw that the planet was still in his sky. He realized ashamedly that the *Vengeance* had made its jump. Since the wagon's orientation in space was still the same, the stars had not moved.

Then the camera hunted-and found. At the center of the screen Lal saw a tiny white dot that drifted slowly across the field of stars. That couldn't be the Enemy. It couldn't be closer than ten thousand kilometers. The detonation of the *Vengeance* would have been quite effective at that range, but the jump should have been more accurate.

Apparently the same thought had occurred to e'Kraft, who said, "Navigation, how far is the *Vengeance* from target?"

"Ten kilometers. The enemy craft is less than nine meters long."

Less than nine meters long. The smallest interstellar craft the Dorvik ever made was more than a kilometer wide. The Enemy was superior to anything Lal had imagined. If only there were some way to capture the Enemy craft, to learn its secrets. Possibly even more important, to learn what monster would annihilate a sun.

"Detonate the *Vengeance*"

And the screen turned gray.

E'Kraft spoke. "The entire mass of the wagon has been converted to energy, Puissance."

Lal stared stupidly: it was so anticlimactic. They had just created more energy in a second than the average G-class star produces in an hour, yet this explosion was observable only as a blank image screen, or the motion of a tiny hand on the dial of a gravitic surge detector. It would take ten hours for the light from that explosion to reach them. Even then it would set houses afire on the blue planet.

How close it had been... another few seconds and the Enemy might have completed its obscene mission, and so doomed the Dorvik race. For the moment at least, all was saved. He turned to e'Kraft and saw relief mirrored in his eyes.

"General, I--"

He was interrupted by the reappearance of the General's aide. "Puissance, we detected a grave disturbance after the detonation."

"After?"

"Yes, Puissance. Somehow the intruder survived the detonation."

"That's impossible!" shrieked Lal, even as he accepted the awful truth. Nothing made by men could withstand the vast fireball that the *Vengeance* has become. *What were they fighting?*

The game might already be over. Lal's eyes looked across the Imperial gardens, but his mind saw a wave of hell creeping out ever so slowly from an annihilated star. The energy from such a detonation would vaporize planets a hundred parsecs away; and the destruction would creep on, confined to the speed of light but pushing inexorably across the galaxy. His race would know of the explosion, and would retreat before the swelling sphere of oblivion, but little by little the galaxy would be taken away from them, until every planet was lifeless and his race...

"See! The maggots have guessed what we're going to do. That was a nasty jolt they gave us, don't you think, Gyrf?"

"The maggots are trying to avoid the big fry, but they can't save themselves." He paused, overcome by anticipations of delight. "We'll watch the fire spread from nest to nest--for ten thousand years we'll watch them burn."

The other creature agreed enthusiastically, its earlier anger almost forgotten. Neither of them noticed a slight wavering in the air behind them. The distortion was in the far infrared and near microwave. The changing refractive indices moved through the visible, the ultraviolet, the gamma. Still Gyrd and Arn were too engrossed to notice.

"The converter is set to go when we jump, Arn. What's keeping you?"

"The navigation, of course. This is a galactic jump we're making. Give me a few more seconds."

"Idiot"

The shimmer took form. Gyrd turned from Arn and saw what had materialized behind them.

"Mother!"

But for her physical perfection she looked much like her remote ancestors, who tamed fire in Africa and--scant millennia later--played with fission under a stadium in Chicago. There was fear on her face, the fear of a parent who has discovered anew that untrained children are essentially monsters--and that if those children are godlings, then their evil can be satanic. She stared at her daughter, Gyrd, for a long moment, then said slowly, "Why are you here?"

Arn said, "Because we're lost?"

The woman shook her head. "I defused the converter, Arn, right where Gyrd dropped it. You can make no successful lie, or excuse, for what you've done. A million different races, all with the potential to become what we are, would have been destroyed by what you planned."

Gyrd pulled nervously at one of her pigtailed. "But they're just festering in their nests. They don't feel pain the way we can. It would be fun--"

"Fun?" the woman said, and Gyrd screamed.

"Go home now. She frowned in a moment of concentration. "The arithmetic has been done. The machine is ready to jump. I'll be following right behind you."

Both Arn and Gyrd were silent now, dazed. Arn made an adjustment in the controls, and their craft vanished, leaving the woman standing pensively in space.

Lal only caught the last part of the sentence.

"... Gone from the galaxy"

"Damn it! Why didn't you say that in the first place?" snapped Harl.

"Never mind, General," said Lal. He turned back to the aide. "Say that again."

"Puissance, our instruments indicate that the intruder jumped before any attempt to annihilate the sun."

The universe regained.

The silence was finally broken by General e'Kraft. "Have we your permission to resume tactical operations, Puissance?"

Lal looked through him and beyond. For a moment he could feel only the beauty of the luscious gardens and the now safe again stars. *But it could happen again.* The Enemy could sweep in on any large star in the galaxy and set their bomb. "General, you may retreat, and you may ask the Mush-faces for peace terms." He gnashed his fangs once as he discarded his race's dream and accepted a nightmare. "We can spread the news of this day through the galaxy much faster than we can our Empire. And we'll need all the help we can get." But Lal knew with a silent desperation that there would never be enough advanced races to guard all the super stars. "Everything that lives must be banded against them." He shook a talon at the sky

The woman remained a moment, alone. Her feet seemed planted in the wispy Maelstrom--called the Milky Way by some--and faint air vortices encircled her. She gazed out from the sun and "saw" the Dorvik battlewagon twelve billion kilometers away. Perhaps some good could come of this yet. She hoped so. She wanted very much to believe that they were really good children... *all* of them.