## THE MOTE IN TIME'S EYE

When God made Time, He made plenty of it. Irish proverb.

I

The spaceship was approaching the end of a profitable 12-year voyage of exploration. It was halfway between the two Magellanic Clouds.

This had been the most daring expedition the human civilization of the Lesser Magellanic Cloud had ever sent forth. Its Supreme Magistrates had had great vision, believing that their interests required it.

Their forebears had come from the Prime-Galaxy, 5000 or 6000 years earlier. They had quickly conquered new worlds and increased their population. In the year 27,937 (Universal Datation), when this story begins, the human civilization of the Lesser Magellanic Cloud consisted of about 6000 planets with an average population of roughly 250,000. On some worlds, there were almost 100 million people; on others, there were just a handful of families.

Men could still be comfortable in the Lesser Magellanic Cloud. They could continue to multiply at the same rate for another 20,000 years before reaching the limit of the stellar nebula. But this did not prevent them from going to see what was happening beyond their own systems. Their interest in unknown worlds tended to increase with distance.

The ship was spherical. It could travel one million light-years in one year. When it left Neo-Sirius, it had a crew of 6000. Twelve years later, taking into account births and deaths, it carried 7591. There was room for over 10,000 on board. The power of the ship's generators and weaponry was considerable; nevertheless, considering the distance and the obstacles, the *Vasco* was nothing but an eggshell in the ocean of space. There had been enormous risks, but the people of the Magellanics were adventurous. And the hold of the *Vasco*, packed with booty, was proof enough of the advantages of taking risks in space.

The last 18 months of navigation had proceeded without mishap, in known space. There was no mass of stellar importance to impede the ship's progress within a hundred light-years. The direction detectors had remained silent; had the robots been capable of boredom, they would have sounded an electronic complaint.

There was nothing on board the *Vasco* to indicate that it had been crossing the biggest battlefield in history for the last 1000 of light-years.

The ships which were in conflict—we'll call them ships for lack of a better word, but they bore practically no similarity to the sort of craft the *Vasco* was—lurked in folds of space where the *Vasco*'s detectors could not reach. Although the battle had been raging for over 7000 years, its front was still spreading. In fact, the battlefield had shifted constantly throughout time. The war had started, as far as the *Vasco* was concerned, in a future so remote that its passengers could have no concept of it. The adversaries were two powerful civilizations from two different galaxies.

In theory, allowance had been made for the possible accidental incursion of ships foreign to both sides into the battlefield; the non-belligerents were not even supposed to suspect that they were going through a battlefield. But somewhere, a mistake had been made.

A series of unlucky circumstances had propelled the *Vasco* into the very center of the battle. First, it went through a zone in which a "cruiser" had exploded, thereby shattering the very structure of the space-time continuum.

Then, the *Vasco* slipped from "underspace," where it was traveling, into "multispace." There, it was immediately picked up by an unmanned robotic station which automatically proceeded to surround it with a minefield, as a standard precautionary measure. Had the *Vasco's* detectors been equipped to identify the mines for what they were, or had Captain Shangrin had any idea of the risks his ship was running, he would immediately have stopped the engines; but he had no reason to suspect that anything was amiss.

Nor did the station's "warning shots" alert him: the field which ought to have inhibited ordinary enemy generators was ineffectual against the primitive engines of the *Vasco*. Finally, the ship passed at less than one light-year from a mine and set it off. Without a sound, without a tremor, the *Vasco* was instantly projected into the past.

The robotic station immediately sent a report to its controllers that an alien ship of unknown origin had been withdrawn from the battlefield. The current state of the war in that sector was so preoccupying that the controllers decided to postpone an inquiry into the incident, since there were far more urgent problems that needed to be dealt with.

Nevertheless, an abridged version of the report was forwarded to Headquarters. But simultaneously, 16 million other reports, all from different sources, were pouring into their central computers, which were beginning to show signs of overload, and therefore did not pick out the *Vasco* incident.

This would not have been of any consequence had it not been for the rather eccentric nature of the Magellanites.

Captain Varun Shangrin was the Captain of the *Vasco*. The Supreme Magistrates of the 16 sponsoring planets of the Magellanic Cloud had hesitated a long time before hiring him to lead the expedition they were financing.

True, he came from a family which had explored many virgin planets. He had knocked about in countless sectors of space. He had always brought back his ships with their crews. This last was the deciding factor, for the Magistrates were terrified at the mere possibility of giving back to space the tremendous fortunes that they had wrenched from it.

But Shangrin was also reputed to be an adventurer, quick-tempered to the point of violence. His voice could make the stars quake. He was said to be a galley master rather than a captain, an eager warlord, a man who enjoyed life to the full. The Supreme Magistrates of the Lesser Magellanic Cloud trembled in their comfortable houses as they remembered Varun Shangrin's exploits and his laughter. Privately, they referred to him as a pirate, a space brigand, a pillager, and thought him the repository of all vices. But they knew they could launch him into the unknown, sure that he would come back laden with riches, fired up with new routes, his eyes reflecting the glories of new and fabulous worlds.

He made them nervous because he was a truly great leader and a better businessman than they were. He would walk into their elegantly appointed offices, helmeted, booted, trailing the chill of outer space and the smell of machinery, and then coerce them into risking their money in exchange for an uncertain hope. He would leave them panting for months and years, but he would come back unchanged, tanned by giant suns. He made them nervous because what he risked was his life; they risked only their fortunes. And they were afraid of him because he often made outlandish deals with mythical, inhuman beings whom they, the pale merchants of Lorne or Suni, Arno, Yorque or Neo-Sirius, would never know. Their ultimate fear was that, one day, he would loom out of the sky over their cities at the head of a hostile fleet.

They feared him as sedentary merchants have always feared their captains because they did not know him. They could not fathom the source of his laughter or of his strength.

But it was because they were afraid of him that they trusted him. He was invincible; the holds of his ships were always fuller than anyone else's; and he was never defeated. The rewards were enormous, even in proportion to the risks.

And so, when the Supreme Magistrates of the 16 cooperating planets interviewed other candidates, they were disappointed. This captain was too young, that one too timid. A good technician but a poor trader. Too rapacious. Too easy on his crew. Too tricky. Of doubtful courage. Too crippled by space diseases. Too old. Too unstable. Too mediocre.

Too something. The tall and handsome captains of the Lesser Magellanic Cloud filed past the Supreme Magistrates of the 16 planets, but none proved suitable. The assignment was too difficult for them and the stakes were too high. The Magistrates hesitated. They did not want to lose the *Vasco*, the largest, most powerful manmade ship in this part of the known universe.

Then Shangrin came in. He marched right up to them and said: "I will take the *Vasco*." He burst out laughing when he saw the expressions on their faces. As he looked over the handsome captains of the Lesser Magellanic Cloud, he asked the Supreme Magistrates if they wanted children or a man.

So he got the assignment and the *Vasco* was his. It meant, of course, new worries for the Magistrates, new wrinkles, new ulcers, palpitations in their old hearts, but also—in the future—even greater prosperity. Along with the *Vasco*, they let him have an army of scientists, technicians, astronauts, soldiers.

And a mountain of recommendations.

They also gave him a first mate named Gregori, a reliable young man whose fame would perhaps someday equal Varun Shangrin's, and who might be able to bridle the Captain's impetuousness.

Since they were a cautions lot, the Supreme Magistrates took an extra precaution: they made Gregori into a safety mechanism.

But as they were also discreet, they did not tell him. Nor Shangrin. So Shangrin and Gregori plunged into intergalactic space with their ship and its crew, both their hearts yearning for conquest, but with secretly implanted, strange devices in the latter's mind, unknown to both of them.

The *Vasco* and its crew were now on the way back to the Lesser Magellanic Cloud and the devices within Gregori had remained unused so far. They would have remained so if...

Captain Varun Shangrin was calmly raising his china tea cup when a sudden gesture of his first mate made him drop it. The tea spilled all over his red beard, the cup rolled on to his knees and shattered on the floor. Shangrin's blue eyes flashed. His heavy fists came down on the metal table, making it tremble.

"Have you no respect?" he shouted. "At least for this superb Lengsen tea, if not for me?"

"The stars!" said Gregori.

"Well?"

The Captain's eyes flew to the collection of screens which covered one wall of the room. His face, which had been flushed with anger, became ashen; his eyes bulged.

"The stars vanished for a second, then, they came back—but they're not the same ones! It all happened very quickly. If I hadn't been looking at the screens at just that moment, I probably wouldn't have noticed anything. Except the new positions of the stars."

"Never saw anything like it."

Shangrin stood up, looking a lot like a bear. He leaned forward, hunched down, then suddenly he was erect, slightly stooped. He weighed 286 pounds, and was six feet six tall. Of his 67 years, 40 had been spent in outer space. He spoke with authority, was a good technician and a skilled trader.

He went to a screen which gave an excellent impression of transparency and depth.

"I don't know a single one of those constellations—not one. We must have made an enormous jump for the starscape to change that much. Look at the relative positions of the stars."

"Could the computers identify any of those constellations and find our location?"

Shangrin closed his eyes to think better and snapped his huge fingers two or three times. But no inspiration came.

"The crew and the passengers have noticed something, Captain," said Gregori. "They're beginning to worry."

Red lights were popping up everywhere. Almost all the posts on the ship wanted to communicate with the Captain. Then the shrill ring of priority bells was heard. But Shangrin did not stir.

"What are you looking for, Captain?"

Shangrin slowly looked up from under heavy lids.

"Something to say to them, young man. After all, we're lost, as far as I know. What I'm trying to figure out is how to make them think this is an opportunity and not a disaster."

"That's going to be tough."

"In the long term, impossible. But I think I can keep them pacified for ten minutes. You'll see."

Shangrin ran his fingers along a keyboard. All the red lights went out; only one green light remained, the one connecting the Bridge to Navigation.

"Cut all contact between Navigation and the rest of the ship," ordered Shangrin. "All private conversations are forbidden until further notice. All crew members will remain at their posts. They are not to answer questions from the passengers. Is that understood?"

"Yes," answered an anonymous voice.

Shangrin cut the contact with a flick of his finger. Then he turned on the master switch. Seconds later, his voice echoed in all the corridors, public rooms, dining halls, dormitories and cabins of the *Vasco*.

"Captain Varun Shangrin speaking." He cleared his throat and winked at Gregori. "I have an announcement to make. First Mate Gregori and I have been researching and performing experiments in instantaneous teletransportation. We've just tried one out. That's the reason for the sudden change in the stellar horizon. We're going to take advantage of this side trip to visit this new region of space. This will not delay our return—quite the contrary."

He disconnected the speaker.

"Is that the best you can do?" asked Gregori. "They'll be on our backs in an hour."

"A lot of things can happen in an hour. By then, we may have no cause for worry. Or we may have found out what happened. Or even—"he winked again—"within the hour, I may really have found the secret of instantaneous teletransportation. Or you will."

"Neither of us is a scientist, and I doubt if the words 'instantaneous teletransportation' mean anything."

"Frankly, I don't know," said Shangrin. "I know we're not scientists and that we can't possibly make such a tremendous discovery, but we'll dream up some other story for them. That, at least, is well within our power." He gave his loud laugh.

"The essential, obviously, is that no one panics," admitted Gregori.

"Can't be done," said Shangrin. "It's bound to happen sooner or later. There are already two people on board whose insides are tied up in knots."

"Who?"

"You and me. Let's go see the Navigators. Maybe they know something we don't."

"OK," Gregori said hesitantly.

He knew how well the Captain could bluff. He had seen Shangrin talk his way out of tight spots hundreds of times, spots others could not even have shot their way out of. But that he would try to lie to the crafty Magellanites, his own people, was unthinkable.

The Vasco, however, had already done the unthinkable—it had gone beyond the stars.

Henrik, the bald little Chief Navigator, was jumping up and down with surprise and fury.

"But it's illegal!" he protested. "You have no right to forbid all communication between Navigation and the rest of the ship. You cannot take away from the crew the right to be kept informed. You should be—"

"Mr. Henrik," thundered Shangrin, "I have piloted ships when the Captain was the only one with any say-so on board. Times have changed, I know, but I haven't. Anyway, in unusual circumstances such as these, I am allowed to assume full control. Now, let's get down to business. Every minute counts."

Swallowing his rage, Henrik led them into the control room. It was spherical, surrounded by limitless space. The walls were transparent—invisible. Stars shone in the dark. Sometimes larger spots would loom up: nebulous, distant little islands of stars; sometimes a nova would flare up, like a lighthouse set up to guide navigators in a billion-chambered labyrinth of the universe.

The vast cabin where the navigators operated floated in the center of the sphere, reached by a light, transparent walkway. Henrik, Shangrin and Gregori climbed up.

Visible space was an artificial creation. Stars were not directly visible in underspace, where the *Vasco* was traveling at a speed many times greater than that of light. Furthermore, normal space was subject to transformations in underspace which altered the relationships between distances. For this reason, complex instruments reconstructed on the wall of the navigation sphere an image of space such as might have been seen by a hypothetical traveler going through it on the same trajectory and at the same speed as the *Vasco*.

The navigation room was a superb and costly piece of equipment. Its usefulness during long cruises was questionable, for most operations could be better performed automatically by computers. But the Magellanites liked it because they preferred human control to mechanical control. It gave them a maneuverability in stellar clusters that was envied even by the pilots of Prime-Galaxy who had better, more sensitive, but still automatic instruments.

"Where are we?" Gregori asked under his breath, as though speaking to himself. "I don't recognize any of the position of the stars."

Henrik raised his arms.

"I don't either. Nothing is familiar. Absolutely nothing. And I know this sector like the palm of my hand. The sector we were cruising in before this accident, that is. We'll never find our way home. Never."

"If I hear you say that again," roared Shangrin, "I'll wring your neck and throw you out into space. We'll get out of here—and with something to show for it."

"Very well, Captain," Henrik replied with obvious restraint.

"What do the computers say?"

"Nothing yet. I started an analysis at once. I thought, at first, that we'd made an unexpected jump through underspace for some unknown reason, and that we didn't recognize the stars anymore because our perspective had changed. I have the computers systematically comparing the positions of the stars that can be observed with the information available in our databanks, but up to now, they haven't identified a single constellation."

"I see. A topological analysis. Good. And there's no nova, no known nebula?"

"Nothing in the way of novae. The computers haven't been programmed to identify nebulae yet. Only star clusters that are relatively close to the Clouds. By the way, have you noticed anything unusual?"

"Yes. The stars here are clearly more numerous than in the space sector we've just left," Gregori said.

"Quite right. We'd just finished crossing the chasm separating the Lesser Magellanic Cloud from the Greater, where stars are relatively rare. Here, they're distributed more densely—much as in a local cluster of small size."

"I see," said Shangrin. "When do you expect a definite answer from the computers?"

"Maybe in a minute; maybe never. Of course, we could ask them for an approximation at anytime."

"Go ahead; do so," said Shangrin.

Henrik gave some orders. The men bending over their control panels got busy. The synthetic voice of the computer could be heard, muffled, throbbing.

"...There is no known star system consisting of more than twelve units, within a probability of point zero five. In approximately 12 hours, it will be possible to determine the general outline of the stellar cluster surrounding us. However, initial analysis indicates that its shape is different from the one we have just left. Three distant galaxies have been observed: these could be, respectively, the Prime-Galaxy, Andromeda's Nebula and the Swan Cluster. However, it should be noted that they seem to be significantly nearer to each other than they ought to be according to the databanks and that their light—"

"Shut it off," roared Shangrin.

Henrik gave a signal. The computer stopped intoning.

"Of course I don't believe a word of your story about 'instantaneous teletransportation.' It's nothing but a lie."

"I know," said Shangrin. "So what? I tried to preserve the calm and I've succeeded for the time being. What did you expect me to tell them?"

"The truth."

"In other words, that we are lost and we'll probably never see our own homeworlds again?"

"Maybe."

"You think that would have made them more likely to forgive me?"

"I don't know," said Henrik. "But I know you're finished. The ship's Council will fire you."

"You'd like that, wouldn't you? But you'll have to wait a while. This being an emergency, I'm taking over. I'll dissolve the Council if I have to."

Henrik choked.

"You can't push us around. The Guardians will take steps."

"I'm not afraid of the Guardians."

Henrik flailed at the air with his thin arms as though he were struggling for breath. Gregori dragged the Captain out.