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**THE BIG BOOK OF SCIENCE FICTION**

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NO. 1

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# A HANDFUL OF STARS

## CHAPTER ONE

### The Demon With Four Toes

**“H**OW DID it get there?” Baranik asked as he put a head on my cup of Pluto ale. I stared at the swirling images, twisting in tortuous shapes, and thought of Damrosch’s body, a frozen corpse in the lonely void, six light years from the nearest star.

Oh, yes, we who ship in space and lose our lives so that soft-bellied colon-

ists may follow, we have seen corpses before. There have been the wrecks of giant liners whose twisted girders blotted out the starlight. There have been the frozen corpses wandering around exploded spaceships.

But a body, six light years from the nearest star and no spaceship in sight! Such things do not happen. Such things undermine whatever confi-

**They expected recognition, a sign of interest or fright or confusion. There was nothing! The Oranians walked by . . .**

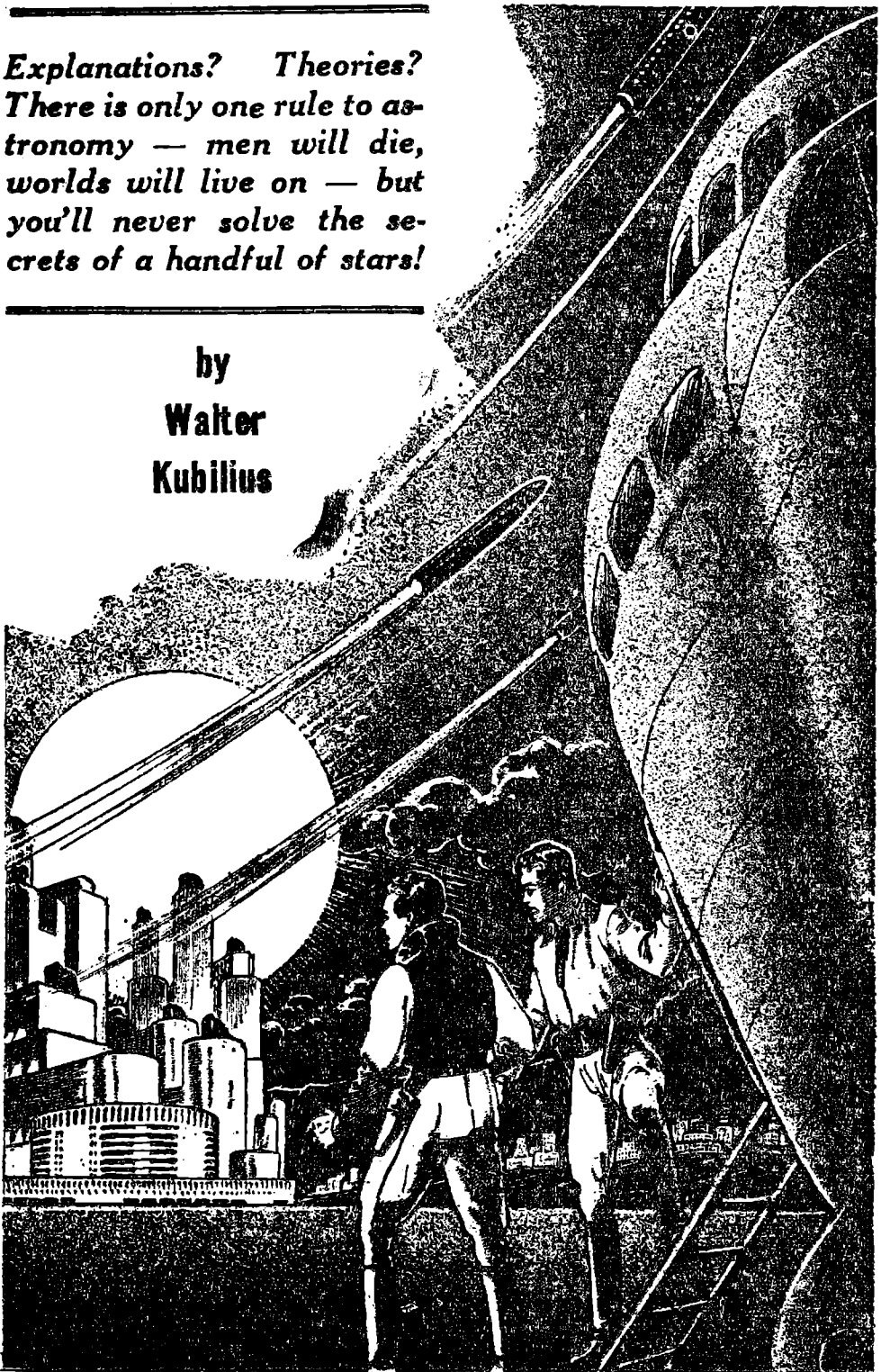


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*Explanations? Theories?  
There is only one rule to as-  
tronomy — men will die,  
worlds will live on — but  
you'll never solve the se-  
crets of a handful of stars!*

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by  
**Walter  
Kubilius**



dence we feel in contemplating the immensity of the universe.

"How did it get there?" he repeated his question.

I thought of Damrosch in that great emptiness. "From a rocket," I said.

Baranik laughed, "Then where is the Trebla? What happened to Mackall and Carroll?"

I shrugged my shoulders and carefully opened the small notebook we had found clutched in Damrosch's fingers. Without a word I pushed it across the table to Baranik. There were only two pages, written in that careful, precise script, so familiar to us who knew Damrosch's handwriting. When he finished reading them, he glanced at me, still perplexed.

"I don't get it," he said bewilderedly. "This seems to be a confused version of an old, outworn, ridiculous conception of the universe. What is all this talk in which he compares himself with an insignificant worm? Who is this Jayone Chravi? Above all, what and where in the name of heaven is Oran?"

I rustled the papers in my hand. "There were only three men in the Trebla, you will remember. It was Mackall who first perfected the Barrier Screen defenses against meteors and made an interstellar voyage possible. He chose a small sun twelve light years away. From the manuscript I gather that they reached that sun and found, among the planets encircling it, one which seemed to be habitable.

"This was the planet Oran."

**SLOWLY** the Trebla hovered over the strange planet, watching for traces of life that might be seen through the heavy atmosphere. Only

a scant dozen light years from Earth, it was the first extra-solar planetary system ever to be reached by the spacemen of 1987. Three other expeditions, sent out simultaneously to other stars, had ended disastrously when mechanical imperfections caused failure in the recently devised Barrier Screen.

Great white mists encircled the planet, breaking here and there to show broad expanses of green, cultivated fields.

"Obviously civilized," Mackall said.

"Down?" Carroll asked.

"Yes. Slowly. We can't afford to frighten the inhabitants."

The steady whispering of the motors turned to a whine as propelling force turned repellant to meet the planet's gravity. Mackall listened intently. There was no falter in the steady whine. He turned to Damrosch with a smile.

"You've done well," he said. "Two years at six times the speed of light, and there's still enough power left for six more years of travel. Apparently the difficulties of interstellar voyages have been finally conquered by your breakdown neutronic motors."

Damrosch waved aside the compliment. At that moment the ship pierced the layers of white mist and nosed into a shallow glide within the planet's atmosphere.

Long threads of gleaming roads stretched between silver dots of cities, spotted on green plains. Grey smokeless industrial centers raised gleaming spires to the sun. Between the high-strung roads and the production areas were the homes, simple, clean and comfortable, of the people of the Second Planet.

Crimson rocket-like planes flew smoothly and without effort through the limits of the atmosphere.

"Down," Mackall said.

Again the low whine and the careful work of balancing descent, speed and gravity before settling down upon the land.

Their eyes were upon the breaking mists. A growing dot within the center caught their glance. Carroll recognized the danger instantly.

"Rocket straight ahead," he said sharply, twisting the levers till the engines screeched in answer to the strain placed upon them. A single crimson rocket, no larger than the automobiles of Earth, flew towards them. It did not slacken speed.

"Port! Port!" Mackall shouted. "He'll ram us!"

Drops of sweat ran down Carroll's forehead as he strained at the controls. It was no easy thing to force a many-thousand-tonned metal monster into a sharp turn. The plates groaned and squealed with each added burst of the rockets. There was another low humming noise, the danger signal. Carroll's heart sank as he heard the distant rumble of a motor bursting. At the same moment the crimson rocket sped into the space they had just left. It shot

past them, a scant few feet away, and in that flash of a second Damrosch saw the word on the crimson rocket: "Oran."

"Fool!" Mackall gasped, "he must have been blind! Couldn't he see us?"

A shudder ran through their ship. A series of coughs told them the motors had followed one another into oblivion. The ship swooped suddenly to the right. In a wider circular motion it plummeted down slowly to the planet, like a broken feather.

Sky, mists, rockets and roads turned below them as they plunged downward to crash into the planet.

Waves of fire pierced his body and burned each individual cell. A thousand pinpoints of anguish flowed through Damrosch as he weakly opened his eyes and looked about. A glance was enough to tell him what had happened. The ship had struck broadside-on, and the shock had been absorbed evenly throughout its great bulk. Instead of the vast mangled duro-steel skeleton that he had expected to see, there was nothing worse than a few minor breaks and a series of burnt-out motors to repair.

Carroll was busily engrossed in checking the extent of the damages.

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Mackall, bandage around a scarred forehead, advanced towards him.

"Nasty shock you had," he said cheerfully.

"The ship?" Damrosch asked.

"Carroll's checking now. Lucky we didn't land on the city, or there'd be hell to pay. We're on a level field, apparently an airport of sorts from the number of rockets at the other end. So far the Oranians haven't come to investigate us."

"Oranians?"

"Have to give them some sort of name. Oran was the name of the ship that almost ended us—so—Oranians."

"Oran!" said Damrosch, struck by the memory. "English letters—how is that possible?"

Mackall shrugged. "You tell me," he said. "We all saw it."

Damrosch got up, ruefully shaking his head as he felt a breath of wind. It was not striking him squarely, but he felt a continual ebbing and flowing of air around him.

"Draft," he said. "There must be a leak somewhere."

Carroll overheard. "No leaks," he called out. "There isn't a single crack in the hull."

Mackall frowned. "I can't figure it out," he said. "It's been with us since we came down—yet there's no leak."

Damrosch watched a small cloud of dust eddy within the control room. He shrugged his shoulders.

**I**N THE morning, when the three had rested and part of the damage to the Trebla was repaired, the three walked to the airlock. They carefully checked the atmosphere and unlocked the great door. As they walked through, a sudden gust beat against

them, only to stop quickly when they were a few feet away from the ship.

They were standing on a broad field. Towards one end of the field they could see groups of rockets rise and fall in echelon. Directly behind them the stretch of green trees was cut by roads, evidently leading to the shining village or city on the small hill-top.

A short distance away was a single road, upon which walked a few beings. They were tall, thin and from the distance seemed very like men.

Two of those who walked turned off the road and began strolling across the field towards them.

"Reception committee," Mackall whispered as he sighted them. "Evidently they're an easy-going lot, not too much in a hurry to welcome us. You can imagine the sensation a spaceship would make, landing on La-Guardia Field."

As they neared, they could distinguish more characteristics of the Oranians. Both were young; a boy and a girl. Both looked like caricatures of human beings. Bald heads, utterly hairless, stood like apples upon stick-like bodies. A visor-like affair hung over each forehead, guarding big, bulbous eyes. Thin-bodied, they ambled along with sinewy movements on absurdly long legs.

"Screwy looking things," Carroll muttered.

"Make no gesture to frighten them," Mackall said. They stood still, waiting.

The two approaching Oranians were having an animated, excited conversation. Their high-pitched voices rang out clearly. Their skins were clear and unwrinkled, but for the brows, and there was something about their care-less walk that suggested childhood.

Mackall stood well in front of Carroll and Damrosch, extending his hand to show it empty of weapons. Carroll held his ionizer tightly. They expected recognition, a sign of interest or fright or confusion. There was nothing!

The Oranians walked by, brushed past Mackall as if he were not there, and calmly strolled on.

Amazed, Mackall stared at the two figures as they turned down a small road leading to the nearby city.

"They didn't see us," Damrosch said flatly.

"Of course they saw us," Mackall snapped. "It must be some sort of custom here to ignore strangers. Let's follow them to the city."

The highway to the city was also a leading place of four-or-five-passenger planes that rose and settled with remarkable precision. As soon as one had risen, another immediately descended in its place. As soon as the passengers emerged and walked to the nearest sidewalk, the plane rose, driverless, and made its way to the city.

They strolled among the Oranians and were completely ignored. No answer ever came to their questions. Mackall dared not lay hands on them for fear it might be construed as a breach of etiquette. Often they had to step aside to make way for some group that passed by, chatting with great animation.

"Did you watch their eyes?" Carroll said. "They don't see us. One of them smiled at someone walking in back of us!"

"Nonsense!" Damrosch said. "Are you suggesting we're invisible to them?"

"Well, why not?" Mackall asked.

"An object becomes invisible," Damrosch said, "only when light travels

around or through it. Obviously it is not traveling around us, for we can see quite clearly. The invisible man is, ipso facto, blind. We can see, therefore we are visible."

"But still no one has seen us," Carroll insisted. He laughed nervously. "Maybe we're dead?"

Mackall laughed. "Well, there's one way of finding that out. I'll stand here until somebody walks by. If he walks through me we're ghosts. If he falls without knowing what struck him, we're invisible."

"Don't try it," Damrosch said quickly, sensing a queer prickle of danger along his spine.

It was too late. A tall Oranian, his entire head a mass of wrinkles, his eyes like translucent billiard balls imbedded in a skull, walked hurriedly forward. Mackall stood squarely in his path and braced himself for the collision.

They clashed, breast to breast, but the Oranian never wavered in his stride. A weight of several hundred pounds smashed against Mackall's chest. The back of a swinging hand, with the power of a plunging fist, slapped against his bowels and pushed him aside. The Oranian's knee cracked against his thigh and he felt himself sprawling into the grass of the well-kept lawns that hugged the sidewalks.

Carroll ran to help him to his feet.

He shook his head groggily.

"He didn't even pause!" Mackall said.

"Give me an empty food container," Damrosch said abruptly. Carroll glanced at him inquiringly and then strapped the container that hung around his waist, emptied it, and passed it on to Damrosch.

"Made of durosteel," he said, turning it in his hand. "Fifteen times the or-

dinary tensile strength of steel." He tossed it upon the sidewalk and they waited. A few moments later an Oranian stepped upon it and the thin spindly foot crushed the hard steel as if it were made of the softest rubber. When the Oranian had passed on, Mackall dashed to the sidewalk and brought back the container.

It bore the clear outline of a four-toed foot.

## CHAPTER TWO

### The Earth Relics

CARROLL stared at it dumbly. Mackall tried to push both ends to bend against the middle, but could not alter its shape in any way.

"We face the gravest danger here," Mackall said carefully. "Every single object here in motion is like an express train. A falling twig could crush us like eggshells. You, Damrosch," he said, turning suddenly, "you have your own ideas about the nature of the universe, haven't you? Well, what do you make of this?"

Damrosch did not reply.

"Gravity appears to be entirely normal to us," Carroll said. "Even the air we breathe is quite the same as on Earth—and yet. . . ."

"Is it?" Damrosch asked.

"Certainly," Mackall said, breathing it deeply. "It may have a qualitative difference, measureable only by instruments, but it is normal to us—we breathe it and live."

"There's been a stiff breeze blowing all this time," Damrosch said, holding with one hand the flapping bandages around his shoulder.

"Yes, there has."

"Then look at the Oranian couple standing there."

A boy and girl Oranian, indistinguishable but for the softer features of the girl, were standing to one side talking and laughing. The girl crumpled a piece of paper she held in her hand and tossed it away. It floated to the ground. Not the slightest breeze disturbed its fall.

There was no breeze or wind on Oran.

They walked back to the ship.

The evening was spent in tedious repairs. In the morning they decided to go to the city in the distance. Perhaps there they would find some answer to the mystery of Oran.

Carefully and slowly they walked. They did not dare walk upon any of the busier streets, satisfying themselves with the outskirts of the city.

Laughing voices filled the air. They felt like disembodied spirits, privileged to walk in freedom without notice, but nevertheless hampered by physical laws. Many times they stopped in front of what must have been an administration building or school, but since the doors were closed they could not enter.

On the outskirts of the city, not far from the field itself, they found a building whose door was open. Inside was a vast auditorium in the center of which stood a great statue of an Oranian man and woman. Both held their hands upward as if reaching for a high, unattainable goal. In the base of the statue were hundreds of smaller figures. At its foot the Oranians were shown in caves and savage combat. Towards the top the small sculptured scenes showed the advance of science and learning.

They walked through the building, noting only the scientific achievements which, strangely enough, were rarely



stressed. The emphasis appeared to be upon art and culture rather than the search for more knowledge. They were a contented people and, therefore, stagnating.

Damrosch stopped in his tracks.

A small room led off from the main hall and over its doorway hung a sign with the simple English words, "RELICS OF OLD EARTH." Underneath it in vaguely familiar characters were a group of Oranian words, which must have been the translation of the startling sign.

Mackall's mouth dropped open as he saw the words. Hurriedly the three walked into the room. There were no more than a scant two dozen objects carefully placed under glass, with long pages of Oranian words describing them. Upon the wall was an old, broken frieze from a classical building. Across it ran the words:

GAINSBURG COUNTY HOUSE

"Impossible!" Mackall gasped. "That building is still standing! I saw it myself a few years ago!"

In one compartment lay a group of assorted knives, forks and spoons of the twentieth century. They were tarnished and worn as if with the passage of many centuries. Here and there were other things of Terrestrial life that might have been uncovered in excavation—part of a lamp post, a half-wrecked gas range, the rotted wheel of an automobile, the keyboard of a typewriter, a rusted revolver and the first model of an old ray gun.

"These things—" Mackall said. "We left in nineteen eighty-seven. The journey took us two years. But look at this tattered newspaper—dated twenty sixteen!"

It was worn yellow, crinkled and il-

legible around the edges. The gaudy headline told of a political shake-up in a Martian Cabinet.

Mackall said slowly, "We've traveled in time — this is the Earth's future!"

"The Earth is the third planet from the sun," Damrosch said drily. "This is the second. And, the continental outlines of this planet bear no resemblance to those of Earth."

"Geological changes," Mackall said, then shook his head.

"But we've traveled in time, certainly. That's why we can't affect anything around us here. We can see, hear, touch, feel the future—but we can't change it."

"But," Damrosch said soberly, "the Oranians certainly affect us. You ought to realize that, Mackall. If the future is unchangeable, the past should be, too."

"Sophistry," Mackall snorted. He turned aside and examined the Oranian inscriptions under each Terrestrial object. "If this is Earth—"

"We can find out," Damrosch said. "We can search the skies for Earth. If it is not where we expect it, then this is the Earth of a future time, and the Oranians are our descendants of several thousand years."

Mackall shrugged. He turned briskly. "Back to the ship."

"APPARENTLY," Mackall said, when they were back once more in the ship, "traveling faster than light involves dislocation in space-time. If I'm right, we have the explanation of the odd power-thrust relationships we found in using the overdrive. Maybe we can check it with the telescope."

He spun the dial and upon the silver

plate there flashed a brilliant kaleidoscope of stars as he sought the starting point of their journey. "The distance between Earth's present position and its position when we left should give us the time element we're looking for."

The plate slowed and the stars seemed to move slowly and then became stationary. But instead of resting upon the black emptiness of space with stars as a background, the view showed a brilliant star in the center.

"It shouldn't be there," Mackall muttered doubtfully, "but I'll make a spectroscopic examination." He placed prismatic slides over the screen, each a film sensitized to react only to certain lines in the spectrum. When he was finished he noted down the points for each element shown in the spectrum and took them to the files.

He ruffled through the files, rattling off the numbers as he checked one against the other. Soon he was flipping the cards more slowly as he came to the stars that bore similar spectrum markings. At last he stopped. He stared at the card in his hand for a moment, silently, and then withdrew it and passed it on to Carroll.

"What is it?" Damrosch asked.

"Our own sun," Mackall said, shoulders sagging. "Obviously this is not Earth and we have not traveled in time."

"Then what is there to be confused about?" Carroll asked cheerfully. "We're simply on another planet and we can get back to Earth whenever we choose."

"Yes," Damrosch said, "there's no danger, except that we still don't understand anything! How can we explain the fact that these people's language is a derivative of English? It is

what we might expect our descendants to speak. What about the things in the museum? Where did the frieze come from? What about the newspapers that have not yet been published? Who are these people—and exactly where are we?"

Mackall spoke hesitantly, "I think I have it now."

"Another theory?" Damrosch asked.

"In a way, yes. It's the Oranians who've traveled in time—not we! Let us assume they're far advanced and have long ago mastered the secret of time-travel. During one of their trips into the future they came to the Earth of many centuries from now and brought back the relics of that period. Can you see any flaws in that?"

"Why were there no time-machines in the museum?" Damrosch asked.

"What about the similarity in the languages?" Carroll demanded.

Mackall weighed the two questions before answering. "Space-time travel to the Earth's future may have been so common that our language itself was adopted by the Oranians and then changed slightly through the passage of time. As for the machines themselves, it may be simply that we don't recognize them. Perhaps the small rockets we saw are also time-machines."

"A neat theory," Damrosch said, "but there are too many holes in it. What, for example, explains the immobility of everything here as far as we are concerned? Why the wind around us? Why are the inhabitants blind and deaf to us? Why can't we touch, move or change anything?"

"I don't understand," Mackall said, confused. "There's something here which is so contrary to all our accepted physical laws that it defies understand-

ing. I move that we go back to the museum in the morning and decipher the language. It shouldn't be hard, since it's in the Roman alphabet, and we're already noticed words which are familiar to us."

**R**EADING the inscriptions and understanding the constant babble of conversation around them had been easier than they had expected. Once the rudiments had been grasped, the entire language proved to be nothing but an elliptic form of English, extremely abbreviated and terse. Soon they began to understand without any difficulty the comments of the Oranians as they wandered through the museum rooms.

One by one Mackall's half-hearted theories crumbled. Nowhere in any record was there the mention of a time machine. "It must be some sort of state secret," he muttered doggedly to himself as he studied and re-studied the scientific accounts that glowed on the walls of the museum.

Damrosch studied the history of the planet and its people, but each trail led to a blank wall. "Everything is clear, concise and in order," he said, exasperated, "but as soon as the records go back four thousand years they stop abruptly. There isn't a single theory, legend or even question about the origin of the Oranians themselves. I can't understand it. It seems as if they deliberately tried to forget whatever went on before."

"What about the room with the Earth relics in it?" Mackall asked. "Got anything about that?"

Damrosch shook his head ruefully. "Aside from simple labels describing the objects, there isn't a word about them. I've spent hours listening to the

Oranians. As soon as they approach the Earth relics they clam up. Only once did I hear one of them speak about them."

"What did he say?" Mackall and Carroll asked eagerly.

"He said, 'How horrible.' Then he left the room."

The mystery weighed upon them. "Something disastrous must have happened in their contact with Earth's future," Mackall said. "The consequences must have been so horrible that they destroyed the time-machines and left no trace of them."

Carroll laughed. "A good try," he said, "but still not enough. I'm afraid I have another fact which will shock you."

"Well," Mackall said, slightly irritated, "what is it?"

"If you'll glance at the older skeletons, dating back three and four thousand years ago, you'll find smaller skulls, shorter fingers and, what is most important of all, five toes, not four."

"Are you intimating they're Earthmen?" Mackall asked, amazed.

"Yes," Carroll said. "The similarities of skeletal construction are too great to permit any other conclusion."

Mackall wearily shook his head. "I give up," he said. "It's too much for me. Let's go back to the ship before it gets dark."

## CHAPTER THREE

### The Nearest Star

**W**HERE were they? Who were the Oranians? Why were they so impalpable in comparison to the people and matter on the planet?

There were fruits, flowers, wealth aplenty on Oran, but nothing could be

touched or moved. Their hands, touching the gentlest flower that shook to an invisible breath of wind, could not move it an iota. Through it all persisted the never-ending wind that blew and blew with never-diminishing intensity about them.

The sun had set, and a small group of trees upon a hill-top hid the Trebla. There was no moon in the sky. As they turned the hilltop, Carroll stopped suddenly and his mouth fell open.

He lifted his hand and pointed to a small figure walking in the direction of the spaceship. For a moment neither Mackall nor Damrosch realized its significance. Then the truth exploded within them like a shattering nova.

"He'll walk through the ship!" Mackall shouted.

Carroll broke away from them, tore down the hill after the Oranian.

"Stop it!" Damrosch shouted after him. "The idiot, he'll kill himself. Come on!"

Mackall and Damrosch ran down the hill, calling desperately. Carroll gained ground; soon the thin strolling figure of the Oranian was only a few feet away. He lunged forward, every atom of strength behind the plunge, and grasped the man's legs. Scarcely had his arms come together when the walking movement of the Oranian kicked him away. Carroll sprawled on the sand, a gash down his cheek. He stood up again, ran after the moving figure and seized him by the waist. As if he were nothing but a light fluff of cotton, the Oranian walked on, Carroll desperately clinging to him. A slight movement of the Oranian's hand thrust him aside and Carroll was flung to the ground, blood streaming from his face and chest. The Oranian walked on, his

course unchanged, towards the spaceship.

Mackall reached Carroll's bleeding figure and quickly bent down, tearing a strip of his coat to act as a tourniquet.

"Couldn't make—it," Carroll gasped, choking. "Must stop—the ship—!"

The flow of blood could not be stopped. Carroll seized Mackall's hand, held on tight, and turned to watch the frail figure walking casually towards the ship. Each step brought them nearer to death. Damrosch came up to them and knelt beside Carroll. He also turned and watched the Oranian.

The frail figure, timid citizen of this strange world, stopped and breathed deeply, visibly enjoying the peace and comfort of a quiet evening. He glanced at the spires of the city in the distance, the level expanse of the field and through the ship, invisible to him. Drawing the folds of his cloak around him, he moved on.

The three watched.

A moment later the Oranian walked into the ship. Mackall closed his eyes momentarily.

They heard the angry crash of metal and the lurching of a million tons as they gave way to an irresistible force.

Unbelieving, they saw the gigantic form of the Trebla shake and quiver, booming like a thousand mad savages beating on world-size drums. Duro-steel girders, three feet wide, snapped like matchsticks in the little man's path.

When he had passed through, only the wreckage of the Trebla remained behind. A great white cleavage, savagely and irrevocably cut through its center, marked the course of the little Oranian.

**T**HEY carried Carroll to what was left of the Trebla and hurriedly searched through the wreckage for medicine and bandages. Most of the supplies were hopelessly ruined. Here and there were intact cans of dehydrated food. By a miracle a huge tank of water stood untouched. Shop equipment, radio, all the materials for the sciences which might have helped them, were smashed.

They came back to Carroll and gave what solace they could. Before the sun rose on another day, he died quietly.

There could be no burial on a planet whose very dust was immovable. From the ruined Trebla they managed to salvage enough material for a rude, earthly mound. They covered his body and left him there.

Mackall and Damrosch stared at each other.

"Food?" Mackall asked simply.

"Enough for two years," Damrosch answered, "but only enough water for three months, possibly four."

Mackall looked up at the clouds, "it just occurred to me," he said bitterly, "that if it rains on this planet those drops of water will shoot through our bodies like bullets."

After a moment, "I have an idea," Damrosch said.

Mackall shook his head. "If it's another theory about the nature of this death-planet, forget it. I'm no longer interested. After Carroll, you or I. It's only a matter of time."

"There is still hope."

"Hope? What possible hope could there be?"

"Look at all the rockets flying through the atmosphere," Damrosch said. "Wouldn't such an advanced people sooner or later discover the pos-

sibilities of interplanetary and interstellar travel? Their rockets are already able to enter the stratosphere. All they need is more power and a Barrier Screen and they'll have spaceships."

Mackall nodded. "We can't move a fleck of dust, and you expect to take a rocket and turn it into a spaceship?"

"No," Damrosch said. "Sooner or later the Oranians themselves will make the discoveries. It might be possible to enter the ship in the hope that sooner or later it will come to Earth or some other planet which will be real and actual to us."

Mackall shook his head again. "A journey to the nearest star will take a year. We have water for three months."

"Nevertheless," Damrosch said, "the search for such a ship will give us something to do before the end comes. It is a chance in a million."

The days went quietly by. They wandered from city to city, studying every rocket port. They scanned the movie-newspapers that shone in the night in Oranian homes and read the scientific journals whose pages happened to be open in the public libraries.

As the days became a week and one week followed another, Damrosch began to piece together the answer to the mystery. He hesitated before saying anything about his theory to Mackall, for it was understood between them that their disastrous predicament would never be discussed.

It was while he was reading the evening moviecast, watching the screen through the window of an Oranian home, that his heart leaped wildly. Clear and distinct were the words that shone before him: "Jayone Chravi to

attempt non-stop interstellar flight to nearest star."

"Mackall! Mackall!" he shouted wildly, and his friend came running anxiously to him.

"What is it?"

"A flight!" he said excitedly, his voice quivering, hands trembling, "a flight! Someone is going to try to reach the nearest star!"

"Yes—but—"

"The nearest star to Oran—is our Sun, with all its planets and Earth!"

## CHAPTER FOUR

### The Worm

**I**N A small field, not many miles from the sandy stretch where the ruins of the Trebla lay, they found Jayone Chravi and his rocket. It lacked many of the Trebla's features, but it had several others which neither Mackall nor Damrosch could understand.

"We leave tonight," they heard Chravi say in clipped Oranian words to a group of men and women around him. "For four thousand years interstellar flight has been forbidden. I think it time to break with useless traditions and fears. Our non-stop flight to another star will break those shackles of superstition from us."

"Tonight!" Damrosch whispered to Mackall. "Our water! We must bring it here and board ship!"

Hurriedly they left the field and returned to the Trebla. Another Oranian had walked through the wreckage, but the water tank and food supplies were still untouched. Unable to carry what was needed, they improvised a small sled from the materials

of the Trebla, and dragged the food and water eleven miles to the field.

It was late afternoon when they arrived. With a sinking heart Damrosch saw the closed door of the rocket. Locked or not, it was closed forever to them unless some Oranian opened it.

For three hours they waited. The sun sank and still the door was closed. Desperation seized Damrosch. He realized that if that door did not open, their last hope was ended. It might be years before another rocket sailed from Oran to the solar system. By that time there would be nothing left of them.

Towards night, Jayone Chravi came from the small hangar and walked rapidly towards the rocket. Damrosch's agony knew no bounds. If Chravi simply opened the door and walked in, shutting the door behind him, they would be ended. There would be no appeal from their sentence if that rocket left for Earth without them.

Chravi quickly walked up the steps, opened the door, stepped in, and left the door open! With a cry of joy Damrosch dashed up the few steps and into the rocket. Inside, he quickly found what seemed to be a deserted corner in one of the rooms. He stripped himself of the food and water tanks, left them there and ran back.

Mackall called up to him as he appeared in the doorway, "Stay there! I'll pass the tanks up to you."

He hesitated for a moment and then nodded. Mackall bent down, seized the largest tank, and pushed it up the incline to him. Damrosch grasped it, rolled it aside and waited for the other. When they came to the smaller bundles, Mackall threw them up with ~~eyes~~

tematic precision. Damrosch hurriedly took them away from the airlock.

He walked back to the airlock, waiting for Mackall to enter.

"Come on up," he called. "There's little time. The ship will leave soon."

"No," Mackall said.

Damrosch did not understand him. A pang of fear moved through him when he saw Mackall shake his head.

"Come on up," he repeated, louder, "The ship will leave soon. You can't stay here."

"I'm staying," Mackall said clearly.

"Mackall!" Damrosch cried out, "Have you lost your mind?"

Mackall straightened his shoulders. "There is water enough for six months for two men. The journey will take more than a year. One of us can reach Earth alive only if the other stays behind."

There was a silence. Damrosch sagged and a feeling of shame overtook him as he realized the truth of what Mackall said.

"We'll ration ourselves," he said weakly.

Mackall smiled and Damrosch could not go on.

"Goodbye," Mackall said.

Jayone Chravi stepped between Damrosch and the airlock. He called out to a group of men within the small hangar nearby. Five Oranians, the crew of the first interstellar flight in four thousand years, walked rapidly up the gangplank.

When the last of them had passed and the swinging door was slowly closing, Damrosch saw for the last time the smiling face of Mackall. He lifted his hand in a gesture of salute, and then the door clanged shut forever on Oran.

### The Manuscript Found in Damrosch's Hands

WE SCRATCH the surface of knowledge and think we know the truth. How blind are our eyes, how deaf our ears and how dull our sense of touch! How faltering and weak are the steps by which we seek the truth!

For three weeks Mackall, Carroll and I wrestled with the secret of Oran and failed to master it. Carroll died needlessly, for nothing that he could do would ever have changed a hair on that Oranian's head as he walked through the Trebla. Mackall died when he might as well have lived another month in the company of a friend, for his sacrifice for me is nothing. I shall never reach Earth. I shall become a frozen corpse when this Oranian rocket crosses the halfway mark between Earth and Oran.

Explanations? Theories? Yes, I suppose they can be given.

Sitting here by the window, unseen by the Oranians who move to and fro nearby, I watch the stars. Millions of them? Countless myriads throughout a gigantic, never-ending universe? Yes—and no!

All the astronomy we have learned is a lie! Throughout the universe there is nothing but a handful of stars. A handful, perhaps twenty or thirty—and nothing more!

Does a worm, crawling upon a mirror, recognize itself? No, for the nature of the mirror is alien to its existence. It has no fund of experience, nor ability of mind to comprehend what it crawls upon.

We, the spaceships that crawl through the heavens, are like that worm. We have no fund of experience with which to judge the nature of the

physical universe around us, nor do we have the intelligence to do so.

I am saying that the Universe is a gigantic mirror maze.

I am saying that there are no more than a dozen stars and that they are like people lost in a vast Hall of Mirrors. Our spaceships travel this way and that way, constantly lured by the sight of other stars, other images, yet always doomed to meet the inflexible wall of the Mirror.

The Sun of Oran is the same Sun as that of Earth. Which is the real, and which is the reflection I do not know. Only one difference separates the mirror of the Universe from the Halls of Mirrors on Earth—mirrors on Earth reflect the present. The warp and woof of space reflect the future—and the past.

Mackall was right. We did travel in the future. Oran was no more real to us than the reflected worm seen by the one crawling across the face of the mirror. We did not walk on Earth, however, but on Venus as it will be many thousand years from now: peopled by descendants of Earthmen who fled their home planet in shame of its warring past. Wishing to close the door forever, they destroyed all records of Terrestrial life and prohibited interplanetary travel.

Fools that we were for not realizing that all "time" is co-existent! That a thousand light years from us, in the distant constellations of another "galaxy" are the suns around which revolve the Earths of Caesar, Napoleon, Hitler, Adam!

Yet the future, like the past, cannot be changed. The worm on the mirror's face may wonder why his companion is so strange to the touch. We won-

dered why we could not change Oran, or the planet Venus in the future!

I have said that Mackall's sacrifice was useless. It is true, even though this Oranian ship is going to Earth.

Halfway between our worlds the two mirrors must meet. When we reach that point, there will be a split second when Chravi and I can stand face to face. Future to Past, but it will go quickly. I will become a threat to them, and they will cease to exist for me. To avoid disaster I will sit in the airlock.

I wonder how Chravi will feel when he lands on Earth and finds that he cannot move the weakest blade of grass, and that a raindrop will sink through his ship as if it were the flimsiest cloud?

"THERE must be some other explanation," Baranik said. "This is all fantastic. Besides, you must admit, you are only supposing a set of incidents to substantiate this manuscript, which in itself explains little."

"The mirror theory of the universe?" I asked. "Isn't that at least something worth looking into?"

He shook his head. "Utterly implausible and fantastic. There are a thousand and one different facts which will disprove it. A million stars, reflections of Sol in different periods? Come now, surely you don't believe that's possible?"

"I don't know," I said, shrugging my shoulders. I gathered the papers together. Just then a gust of wind seemed to blow against my cheek. It was only the ghost of a breeze. I would have thought nothing of it, but the doors and windows were closed and there couldn't have been a draft.