WORLDS UNKNOWN

CAPTAIN W.E.JOHNS

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Other Space Books

KINGS OF SPACE RETURN TO MARS NOW TO THE STARS TO OUTER SPACE THE EDGE OF BEYOND THE DEATH RAYS OF ARDILLA

TO WORLDS UNKNOWN

A story of Interplanetary Exploration

CAPTAIN W. E. JOHNS

COLOUR ILLUSTRATIONS BY STEAD

LONDON HODDER & STOUGHTON

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AUTHOR'S NOTE

SINCE I began this series of space adventure stories six years ago long strides have been taken by the science of astronautics. At that time, as with aeronautics fifty years earlier, only a few people took the project seriously. Any publicity it received was connected with the war-time V-2 rocket. A few whispers of "flying saucers" were promptly denied by governments which were in fact trying to design such a device.

Today we have a different picture. At the time of writing space has been probed by instrument-carrying vehicles to a depth of more than a hundred thousand miles. Attempts have been made to reach the moon; and others, to Mars, are already contemplated. Russia has hit the moon with a rocket missile. Artificial satellites, one at least carrying living creatures have been put into orbit round the earth and the sun. Now come reports of radio signals from outer space.

A mere ten years ago any one of these things would have strained credulity to breaking point. Now they are so commonplace that they pass almost without comment. At such a speed are we advancing along a road towards enlightenment or extinction. It could be either. Well might we wonder what the next few years will bring.

My introduction to astronautics was accidental. I happened to dine with some pioneers of rocketry and found myself listening to talk of vertical flight (as opposed to horizontal) in terms so casual that it might already have been achieved. It was, apparently, merely a question of time and money.

From that moment I was "sold" on astronautics. It seemed time the younger generation was told something of what the future had in store, so that events could be followed intelligently. The problem was how to do this. Text books, with their terrifying mathematics, and astronomical figures to make the brain reel, were unlikely to appeal. How could words such as "apogee", "perigee" and "albedo" be defined without devoting a chapter to them? I resolved to "sugar the pill" by wrapping fact and surmise in fiction.

Even this was not easy, for the modern boy has an inquiring mind and technical details cannot be glossed over. It had to be explained why in space there is no "up" nor "down"; why earthly terms of measurement, such as time and distance, have no meaning; why weight becomes mass, and speed velocity; the difference between orbital and escape velocity, where and when they occur, and why; why the distance between planets cannot be given because between their nearest and most distant positions this can, over a period, vary by millions of miles; why a pound weight of apples on Earth would weigh three ounces on the moon and many tons on Jupiter. And so on. No. In a book intended to be instructional as well as entertaining this was not easy.

All this will become more easily understood if the first of this series, *Kings of Space*, is read. For obvious reasons repetition has been avoided in the later books, and in the following pages it is assumed that the elementary principles of astronomy and space flight are understood.

W. E. Johns.

Hampton Court 1959

FOREWORD

THIS is the seventh of a series of space-exploration books which began when Group-Captain "Tiger" Clinton and his son Rex, on holiday in the Highlands of Scotland, met by accident an eccentric but brilliantly clever scientist-inventor, Professor Lucius Brane, who was experimenting with a spacecraft of his own design using cosmic rays for the motive power. This was successful up to a point in that it became the means of making contact with a "flying saucer" from outer space. Later the Professor's ship was abandoned in favour of a more advanced machine, the *Tavona*, operated by new friends from other planets.

To avoid repetition which might irritate readers of the previous books, these events, in the present adventure, are assumed to be known. For the benefit of new readers the earlier books appeared in the following order:

Book 1. KINGS OF SPACE, in which the first experimental voyages are made in the Professor's own ship, *The Spacemaster*, and the reader is introduced to the science of Astronautics, commonly called space flight.

Book 2. RETURN TO MARS, in which the planet Mars is revisited, new friends are made, and the origin of the planetoids is learned.

Book 3. Now TO THE STARS, in which a tour is made of the planetoids in a spaceship of the Minoan Interstellar Exploration Squadron.

Book 4. TO OUTER SPACE. Again in a Minoan ship, of the Remote Survey Fleet, a voyage is made into deep space and contact established with ships of even more distant worlds.

Book 5. THE EDGE OF BEYOND. More adventures on remote worlds, civilized and otherwise.

Book 6. THE DEATH RAYS OF ARDILLA, in which the friends find themselves involved in an interplanetary war waged with lethal rays.

Here also, for new readers, are the names of some of the people and places that occur in the earlier books and appear again in the following narrative.

People of other worlds

VARGO. A scientist-astronomer space traveller of great knowledge now living on the planetoid Mino. Now a close friend, guide and counsellor of the explorers, he was the first man they met in space, finding him alone and in a dying condition on Mars, where he had been conducting experiments to make that planet once more habitable. It is in his ship *Tavona* that voyages are made. He and his crew have learned to speak English.

- GATOR. Captain of the Tavona.
- BORRON. Navigator of the Tavona.
- MORINO. Daughter of Borron. She lives on Mino and is Rex's girl friend. She has taught him the Minoan sport of wing-flying (soaring flight over short distances by means of wings strapped to the arms) made easy by the low gravity of the planetoid.
- ROLTO. A space pilot of the Minoan Remote Survey Fleet who, having observed the explosions of hydrogen bombs and the launching of uncontrolled space rockets from Earth, holds them to be a danger to the entire Solar System. He is in favour of destroying the population of Earth before they destroy themselves and others.
- MULTOVA. Born on Mino he is now an engineer on the great planet Terromagna. He is a friend of Vargo and the Earth party.

Planets, etc.

- MINO and LENTOS. Two of the chief planetoids, of which there are many, most of them having orbits between Mars and Jupiter. According to Martian tradition they are the remains of a great planet named Kraka which in ages past went to pieces in an explosion so violent that all life on Mars was destroyed and the mighty planet Jupiter was set on fire. It is still burning. The descendants of the few survivors, who happened to be away in spaceships at the time of the explosion, are now trying to restore life on Mars, a project which has been helped by the Earth party by means of the importation of fruit and vegetable seeds.
- TERROMAGNA. A vast, ancient, super-civilized planet, in a distant galaxy. Being much older than Earth it is a long way ahead in culture, scientific knowledge and general civilization.
- ARDILLA. Another old and mighty planet which tried to conquer others in its constellation by means of universal rays which it is able to control. This was frustrated by counter-rays sent out by Terromagna. The Earth party was there at the time.
- DACOONA. A little-known planet where the inhabitants live to an incredible age. The reason for this is not known, but doctors on Terromagna believe

it to be the result of a peculiar gland and propose making an experiment to confirm this.

From all this it will be realized that Earth is not the only planet on which human life exists. The explorers have discovered that as a general rule the larger and older the planet the more advanced it is in knowledge. Each (like Earth) is striving for perfection. They have also proved that while on different planets the atmospheres may vary in composition, density and temperature, the basic physical laws that govern the Universe, such as gravity, are constant, and the same everywhere.

Many of the older planets have spacecraft of one form or another (as will Earth in the not very distant future) as well as other inventions and scientific devices compared with which those of Earth are in the primitive stage. In nearly every case the motive power is derived from cosmic or other rays, which occur everywhere. On Terromagna, for example, all disease has been conquered. Television, in colour and with large screens, has developed to become interplanetary. That is to say, Terromagna can see what its neighbour planets in the constellation are doing. Earth, they say, which in a few years has reached Eurovision, will one day be able to do that—if it does not destroy itself by its efforts to do too much too quickly. All these things take time.

Most of the friends the Earth party have made in space were able, by reason of a superior intelligence, to speak English quickly. Rex speaks Minoan fairly well.

Not all civilizations are alike, of course. Each has gone its own way to achieve the ultimate goal, which is happiness. The planet Ando, it was found, having passed through the Mechanical Age, is now seeking peace of mind by a return to simplicity.

Some worlds have no life. Some have no human form, as it is generally understood. On some of the newer planets life is still in the Stone Age. And there are some on which another form of life, insect or animal, has become dominant, in the same way that on Earth, aeons ago, the great lizards were masters.

DEFINITIONS YOU SHOULD KNOW

- STAR. A body that shines with its own fire. Our sun is a star.
- PLANET. A body which has no fire of its own but shines with reflected light.
- PLANETOIDS. The name given to a great swarm of nearly 3,000 minor planets that have orbits in our Solar System. None has a greater diameter than 500 miles.
- CONSTELLATION. A group of fixed stars and planets.
- GALAXY. A luminous band of innumerable stars too distant to be seen separately with the naked eye. The *Milky Way* is a galaxy. Our Solar System is part of it.
- SATELLITE. A secondary body revolving round a greater one, known as a primary. Thus, our moon is a satellite of Earth. The diameters of known satellites vary between 5 miles (as in the case of Deimos, a moon of Mars) and 3,550 miles (as Titan, a moon of Saturn).
- UNIVERSE. The whole system of stars, planets, etc. existing in space. This comprises millions of galaxies, each containing millions of constellations and solar systems. Our own Solar System, with its sun in the centre, is a microscopic part of the whole. How far the Universe extends, or if it has an end, is not known, and probably never will be known.

Names of	Diameter	Length	Length	No. of Satellites
Planets	miles	of Day	of Year	(moons)
Mercury	3,100	88 days	88 days	Not known
VENUS	7,700	Not known	224 "	Not known
Earth	7,900	24 hours	365 "	1 (The moon)
Mars	4,200	24½ "	687 "	2
Jupiter	86,000	10 "	12 years	11
SATURN	71,500	10 "	30 "	10
Uranus	32,000	11 "	84 "	5
Neptune	31,000	16 "	164 "	2
Pluto	7,700	Not known	248 "	Not known

THE SOLAR SYSTEM Starting from the sun and moving outwards.

The increase in lengths of the years is because of the greater distance from the sun, resulting in the longer journey which the planet must make round it. The planets revolve round the sun in elliptical paths. Moons revolve round their planets in elliptical paths. From the smallest meteorite to the greatest planet (Jupiter) each must follow a set course round its focal point, the sun.

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CHAPTER I

THE PROFESSOR SPOTS A STRANGER

THROUGH a night-dark sky, surrounded by countless points of light, some bright, some dim, that were the suns, the moons, the stars and planets of the eternal Universe, the Minoan interplanetary ship *Tavona* sped on through the cold, silent void, which on Earth is known as "space".

In his heavily-cushioned seat by an observation porthole, gazing into the vast emptiness around the ship as an ocean voyager will sometimes regard a lonely expanse of sea, sat Rex Clinton, now aged seventeen, tall, lean, fair, grey-eyed, citizen of England, part of an insignificant island on the planet Earth. His expression, if his face revealed one at all, was of thoughtful resignation, with perhaps a little apprehension; for although he had made many interstellar journeys he had never been able quite to conquer the heart-chilling fear that came from knowing he was detached from the world of things he knew and understood. He was also aware that he might never see them again.

There was nothing physical about this fear. He was not afraid of death. That was bound to happen sooner or later wherever he might be; but he would have preferred this, when his time came, to occur on his home planet. There was something repugnant in the idea of leaving his bones on a distant star, or in a metal coffin, in a spaceship, whirling for all time in some remote region of the infinite Universe.

He had long ago analysed this peculiar form of fear. Ordinary fear, he perceived, arose from the presence of a peril that could be seen, heard, or felt. In such cases the chances of survival could be calculated. In space there was nothing, no particular object, to fear. The emotion sprang from the unknown, the awful immensity, the utter loneliness, the majestic solemnity of the Universe itself. It was this alone that caused the brain to reel and the heart to quail.

Perils there were, of course. He had encountered many, and would, he had no doubt, experience more; but these had invariably been of such a nature that not by the widest stretch of imagination could they have been foreseen. Therefore there had been no anticipation of the event; and physical fear is, after all, nothing more than the expectation of death.

Rex was ageing faster than his years, the result of the burden of the tremendous knowledge he possessed. Of this he was certain: no man having

made a voyage in space could ever be quite the same again. The discovery on Earth of the power of steam had changed the face of that particular globe, for every invention since had stemmed from it. The splitting of the atom and the invention of the hydrogen bomb had again altered the outlook of the population.

When these same people knew, beyond all shadow of doubt, reflected Rex, that there were other worlds in the Universe inhabited not only by intelligent beings, but by civilizations compared with which Earth had barely emerged from primitive barbarism, the shock might be so great as to throw everything into a state of chaos. It was for this reason that the space explorers had remained silent.

Perhaps the people of Earth would never know the truth. One day, and it could happen at any time, there would be a blinding flash and Earth, and possibly the whole Solar System, would be no more than a few cinders drifting in space. Rex had seen this happen to other worlds. Astronomers on Earth could see it happening, too; they called it "nova"; but either they had not grasped the entire significance of it or preferred to ignore it in the fond belief that while this could happen to other worlds it could not happen to theirs. Collision between worlds, and worlds and their moons, or satellites, were by no means uncommon.

What would be even worse, Earth could die a slow death. It needed such a small thing to bring that about. A slight change in the orbit, taking Earth farther away from its sun, and the water would turn to ice and the soil to the hardness of granite. A movement nearer to the sun would scorch from its face every form of life, animal and vegetable. Rex had seen worlds after such disasters. He also knew there were civilizations so far advanced in science and astronautics that they could, should they so decide, destroy all life on another planet. Rolto, Captain of a Minoan Remote Survey Fleet, was in favour of liquidating Earth, holding its careless experiments with bombs and rockets to be a danger to every other world in the Galaxy. Fortunately he had been overruled by prudent statesmen.

The simple truth was, pondered Rex, everything had its day, its hour of perfection, before decline and death. That was a basic law of the Universe and planets were no exception. What amazed him was the folly of men on Earth who behaved as if there were no end to life or anything else. If they knew what he knew, had seen what he had seen, they might renounce war as futile and cease their frenzied rush to acquire wealth, power, or whatever it was they imagined could produce happiness. Other worlds had learned their lesson and he could only hope Earth would come to its senses before it was too late.

Apart from Rex there were eight persons in the *Tavona*, his usual companions and a skeleton crew. In their customary places were Group-Captain "Tiger" Clinton, one time of the R.A.F., Rex's father, an older edition of his son, going grey at the temples but still agile and clear-eyed, Professor Lucius Brane, elderly, thin, below average height, mild-looking, clean shaven with unruly hair and steel-rimmed spectacles usually balanced on the end of his nose. His eyes, under bushy brows and a high forehead, were blue and curiously bright. Also, as usual, he was carelessly dressed and from time to time dipped into a paper bag for one of the caramels he preferred to tobacco. The third member of the Earth party was Squadron-Leader (Medical) Paul, also ex-R.A.F., in which Service, by reason of a burly physique and humorous expression, he had been known to his friends as "Toby". At the moment he was passing the time by rearranging his medicine cabinet.

The crew, all men of wide experience in space travel, comprised Gator, the *Tavona*'s regular commander, Borron, the navigator, and Vargo Lentos, who had now assumed the position of interstellar relations officer. The other two were crewmen-engineers, both from the planetoid Mino: Nibo, a signals expert, and Lesta, a mechanic. All spoke English fluently from long association with their friends from Earth. These were sufficient to operate the ship in view of its simple mission, which had been no more than to pay a call on the Professor at his Highland home, Glensalich Castle in its remote glen.

After their last perilous voyage^[1] Rex had a feeling that it might be the last. All agreed they had been lucky and it was unreasonable to suppose that such good fortune could continue indefinitely. Moreover, the Professor, who was keeping a detailed record of their flights and discoveries, had as much work to do as was likely to keep him fully occupied for the rest of his days.

[1] See *The Death Rays of Ardilla*.

But after a few months on Earth there had come the usual restlessness, the desire to see more, to know more. It is a disorder common to most explorers and well described by the German word *wanderlust*. The only cure for it is to set off on another voyage, and Rex knew it was only a question of time before the Professor announced his intention of making contact with the *Tavona* with the object of making "one last trip". Every flight was to be the last. But Rex knew in his heart there would be no last flight until the day

came, as he was sure it must, when they would "fail to return". They would, he was convinced, face the dangers of the Unknown once too often. For that he had long been prepared and had ceased to worry about it. He had only one regret. He would have liked to see the effect on Earth of the publication of the Professor's papers, which on his death, not before, were to be handed to the Royal Society.

In the event, the necessity of putting out visual signals to bring down the *Tavona* had not arisen. One night Vargo had merely walked in to see how they were getting on. He brought no news of particular importance, but the result was inevitable. When at dawn the *Tavona* had taken off they had departed with it.

There was no immediate danger, or so it was assumed, for the object of the voyage was no more than a run to Mars to see how the work of restoration, for which the Professor had largely been responsible, was progressing.^[2] As a matter of fact, signs of this were now visible through the Professor's telescope, and Rex found himself wondering how long it would be before the astronomers in the big observatories on Earth noticed the changes brought about by the cultivation resulting from the clearance of the old irrigation canals.

^[2] See previous books in this series.

Not for a moment did Rex expect the flight to end there. Under the pressure of the Professor's insatiable curiosity it would continue to the planetoids Mino and Lentos, and from thence to the Second or Third Region of the Galaxy. It was not unlikely that they would go on to that amazing planet, Terromagna, on the far fringe of it, the excuse being to call on their friend, the super-scientist, Multova.

That was the trouble, pondered Rex. There was no end to the business. With millions of planets in the Universe space exploration could go on indefinitely. Even with space travel achieved, no one man could in his lifetime hope to see more than a microscopic section of the everlasting heavens. It was significant that the Professor had taken to misquoting the saying often heard in the Victorian Era, "Out of Africa always something new." His version of it was: "Out of the Universe there will always come something new."

That, of course, was what the Professor adored. Something new. Even Rex had to admit that there was an irresistible fascination about a new planet. It was the same curiosity multiplied a hundredfold which from the earliest times on Earth had lured explorers on to see round the next bend of an unknown river, or beyond the next range of mountains. Rex hoped there would be no new planets to distract them, for a while, anyhow. Although he could not have suspected it, these hopes were doomed even earlier than he had imagined possible. In the meantime there was nothing to do except sit and think. There were books in the *Tavona*, but Rex had found it almost impossible to concentrate on reading while in transit through space. The doings of people on Earth seemed so trivial compared with what was going on elsewhere.

After a long period of silence the Professor suddenly exclaimed: "Do my eyes deceive me or is there a newcomer in the zone of planetoids?"

"It is new," answered Borron, who by this time spoke English fluently. "I have been watching it for some time."

"You didn't mention it."

"I thought it better not to."

"You were afraid I might want to go to it, you rascal."

"Yes. My orders were to return to Mars."

"How do you account for the appearance of a new planetoid almost directly on our course?"

Vargo answered. "It must be one of those that move on an exceptionally long orbit. You don't need me to tell you that most of these small bodies which you call planetoids have an extremely elliptical orbit. The distance from one end to the other is so vast that they may disappear from sight for ages. Hidalgo, for example, passes beyond the sun at one end, and returning across the orbit of Jupiter almost reaches that of Saturn. The one we now observe could have made such a journey."

"You have never seen it before?"

"Never."

Borron muttered: "It is these far voyagers that make my work difficult."

"Could the length of the orbit have any effect on the possibility of life on such a body?" asked Rex.

"That would depend on how near the body passes to the sun, or how far away from it, it goes. Near the sun the heat might be too great for life. Too far away from it, too cold."

"We saw that on Arcadia," put in Toby.^[3]

"How very interesting," murmured the Professor, popping into his mouth one of the caramels without which he seldom went far. "Don't you think. . . ?"

"No," put in Gator.

"You don't know what I was going to say," complained the Professor.

"You were about to suggest we made a landing on this stranger."

"Quite right," confessed the Professor. "Why not? It wouldn't mean going far off our course. Besides, such an opportunity might not occur again in a thousand years."

"It might be dangerous," said Vargo.

"I must say you are a nervous lot for space explorers," complained the Professor. "At least let us go near it and see what it looks like from close range."

Vargo shook his head sadly. "Professor, I am afraid you are never satisfied."

"I dislike missing opportunities."

"What have your friends to say about it? You know that by your curiosity you risk their lives as well as yours."

Tiger shrugged. "It's all right with me."

"And me," added Toby.

"In that case I can't very well object," said Rex.

"Very well." Vargo passed the request to the captain. Gator spoke to Borron, and the ship took up its new course towards the unknown planet which, as the *Tavona* closed the gap between them, increased perceptibly in size until it soon appeared as a yellow lantern suspended from the black vault of heaven.

What adventures, what wonders, if any, did it hold, mused Rex, a little fearful yet conscious of that mounting sense of excitement which the approach to an unknown world never failed to produce. Was it a full-sized planet or merely a planetoid, too small to carry life? As yet there was no indication, although it seemed unlikely that a body of any great size could wander into the position of the newcomer without causing tremendous damage.^[4]

^[4] No planetoid yet discovered has a diameter greater than 500 miles. Ceres, the first to be spotted, by an Italian monk named Piazli as long ago as 1801, has a diameter of 480 miles. Some planetoids have very long elliptical orbits.

In any case, even if it did turn out that there was life on the stranger it did not necessarily follow that it would be dangerous. That, fortunately, was the exception rather than the rule.

"This promises to be interesting," remarked the Professor from his window, rubbing his hands. "Anything could happen here if, as I suspect, we have come upon a wanderer from some distant part of the Galaxy."

"We shall soon know all about it," said Vargo, in his thin, precise voice, as the jet brakes came into action to check the *Tavona*'s velocity.

CHAPTER II A LUCKY ESCAPE

As the *Tavona* drew near the new objective it became clear to Rex that it was larger than he had expected, although it was not to be compared in size with Earth, for example. He judged it to be not more than half the size of Earth's moon, which would give it a diameter of about a thousand miles. Even that was large enough for it to carry some form of life provided the general conditions were suitable.

Having descended to a low altitude, a few hundred feet above the surface, Gator brought the spacecraft to a halt for a brief inspection. Nothing occurred to cause alarm so he began moving horizontally, very slowly, in order that the whole terrain might be surveyed.

It was at once evident that vegetable life was abundant. Indeed, it looked a pleasant enough little world, although with the surface mostly level the landscape was somewhat monotonous. However, there was one range of low hills, well wooded, with what appeared to be pools of water at the base. But for the most part the ground was flat, open grassland, dotted with groups of trees in the manner of spinneys in an English park. What they were really looking for was movement, which would of course be a sure indication of human or animal life. Rex saw no movement; nor could he see habitations or anything else of an artificial nature.

"Well?" queried Vargo, looking at the Professor. "Have you seen enough or do you want to tempt providence by landing?"

"I see nothing below that might do us a mischief."

"That doesn't mean there is no danger there," argued Vargo. "We can't really see anything from here."

"Surely that is all the more reason why we should land?"

"With an unknown world there are always risks."

The Professor looked at Vargo over his glasses. "May I remind you, my dear fellow, that if your Interplanetary Survey Fleets had never taken chances you wouldn't know as much as you do about the Universe."

Vargo sighed. "You make a point there," he admitted. "Have your own way."

"Having come so close I think it would be a pity to pass on without establishing such facts as a short stay would reveal. There might well be plant life, if nothing more, completely unknown to us."

"Just a minute," put in Tiger. "You seem to be taking it for granted that there's no form of animal life down there."

"Have you any reason to think differently?" asked the Professor.

"I have. While you were talking I saw some sort of creature dart into the trees near the foot of those hills."

"What did it look like?"

"I wouldn't care to say. I only caught a fleeting glimpse of it. I don't think it was quite large enough to be a human species; but it might have been a big monkey."

"Did it move in an upright position?" inquired Vargo. "That should settle the question."

"Again I couldn't be sure. It might have been upright in a crouching position."

"If there were intelligent human beings down there we should see their dwellings," declared the Professor. "Instead of wasting time talking I suggest we go down and save further argument."

"I must confess I see no cause for apprehension although experience has taught me not to rely too much on that," said Vargo.

"Before we talk about landing it might be a good thing to test the atmospheric conditions," interposed Gator, dryly. "They may determine the question for us." He took the ship down to an altitude of forty or fifty feet and Borron went into the small chamber between double doors where tests could be made without the interior of the ship being affected.

During the few minutes he was out of sight doing what was necessary, the others kept close watch on the ground; but no one saw a movement of any sort, nor anything else to suggest animal life.

Borron returned to announce an atmosphere that was somewhat thin with rather a high content of oxygen. Pressure was less than that to which they were accustomed but not so low as to require the use of space equipment.

"Then let us stretch our legs and take the opportunity of tidying up the ship," suggested the Professor.

"Nibo and Lesta can clean up while we are outside," said Gator, allowing the ship to sink softly to the ground in what turned out to be long grass near the foot of the hills which here ended abruptly to form a low cliff.

The doors were thrown open and they stepped out into cool fresh air under a cloudless sky of palest eggshell blue. There was not a breath of wind to stir a leaf of the trees or blade of grass. Absolute silence reigned until the Professor made a remark about the decorative type of grass, which was a deep blue-green in colour and of the "shaking" variety. Vargo examined it closely, and in the light of his experience, suspiciously, for they had known pollen to have toxic properties. However, he said it seemed harmless enough so they walked on a little way, slowly, the Professor heading for a group of low-growing trees which turned out to have thorn-covered trunks and small stiff leaves in the manner of what on Earth is commonly called a "monkey puzzle" tree. In fact, except for a peculiar lightness of body, the result of the low gravity on a small world, Rex thought they might have landed on some uninhabited corner of Earth. This "light" feeling in his limbs, which he had often experienced, created a sensation of exhilaration. The only thing about it was the after-effects when one returned to normal conditions; then the feeling was reversed, and one became conscious of a rather tiring heaviness.

Standing nearly waist deep in grass they waited while the Professor made some notes. "I don't see anything else of interest," he remarked, closing his book. "But there is one thing that puzzles me. Nature does not waste its energy on the production of anything unnecessary for its survival. What object, we may ask ourselves, had these trees in providing themselves with brutal thorns, which would certainly prevent any creature from climbing them, or, for that matter, interfering with them in any way. Against what are they directed? Why do they need protection?"

The question was, in a way, answered by Toby, who now joined the others after hanging back to examine a piece of rock. "I see smoke!" he exclaimed, pointing to a thin white column that rose into the air from a spot some distance away. "That looks as if there is someone here," he concluded.

"A volcano," suggested Rex.

"No—no. The terrain does not look volcanic," disputed the Professor. "There is just a chance," he went on, as they all stood staring at the smoke, "that a fire may have been started by spontaneous combustion. If——"

He got no farther, for the next instant all was pandemonium as they found themselves struggling in the hands of men as repulsive as Rex had ever seen; and he had encountered some grisly specimens.

They were short-legged, broad, had abnormally long arms with bulging biceps and were covered all over with coarse hair. With small eyes, wide noses and hideously large mouths filled with projecting teeth, they were not unlike small gorillas. Their strength was fantastic, and struggle desperately as he would Rex was as helpless as a child in the coils of a boa constrictor. In fact, until he caught a glimpse of the face of his assailant he was under the impression that he was in the grip of a monstrous beast. In a matter of seconds he had been flung to the ground and his arms lashed to his sides with a rope of roughly plaited grass. His legs were tied together in the same manner. Panting, feeling like a trussed fowl, he looked up and for the first time saw his attacker clearly. Any doubts he may have had about the creature being a beast were at once dispelled. It was a man, or a grotesque imitation of one; the sort of early human being he had seen depicted in magazines as a representative type that had roamed Earth in its earliest ages. There was, therefore, nothing particularly remarkable about it. They had apparently landed on a very young world, or one where mental development had for some reason come to a stop long ago. The same thing had happened to certain tribes on Earth, he reflected. As far as he could see from his prone position there were not more than five or six of the creatures.

He saw his friends had suffered the same fate as himself. In fact, they were thrown together in a heap while their captors with uncouth cries did a sort of war dance round them. This did not last long. Suddenly the creatures bounded off with enormous leaps towards the ship. They had, Rex thought, caught sight of Nibo and Lesta.

"Are you all right, Rex?" asked Tiger, anxiously.

"As right as can be," answered Rex, ruefully. "I'm still dazed by shock. I can't understand how it happened. Where did those brutes come from? I didn't hear a sound."

"They must have come from those trees behind us. It would have been easy for them to creep up to us through the long grass. We made the mistake of not keeping a look-out. We should have known better, and remained on our guard until we had satisfied ourselves that the place really was uninhabited."

"We were warned," said Toby, bitterly. "I saw smoke."

"It was that smoke that did the mischief," asserted the Professor. "We were all looking at it. It might have been a trick to distract us. These fellows are low types but they are obviously able to think or they would not have provided themselves with ropes. I shall never forgive myself for bringing you here."

"Nonsense," retorted Tiger. "We all wanted to see the place so we are equally to blame. What I don't understand is why they didn't kill us out of hand."

"From the shape of their teeth I would say they are flesh-eaters, possibly cannibals," rejoined the Professor. "Failing any other kind of meat they might eat each other."

"Meaning that we are likely to make a change of diet."

"This is serious," broke in Vargo. "We must act quickly or we are lost. Can anyone see what they are doing?"

"They went into the ship," informed Gator. "I raised myself for a moment and saw them go in."

"In that case Nibo and Lesta must be in the same fix as we are," said Borron. "Can no one think of anything? This may be our only chance to escape."

"Even if they don't kill us, if they damage the ship we shall never be able to get away," said Toby. "Yet what can we do?"

Tiger supplied the answer. "Rex, roll over and try to prop yourself against me. In that way you may be able to see what they're doing. If I can get my teeth on your rope I may be able to work it loose, or bite through it. It's only grass and doesn't look very tough."

With some difficulty Rex inched his way to his father then raised himself until he could see over the top of the grass. What he saw dried his mouth and held him speechless.

"What is it?" demanded the Professor. "What do you see?"

"They're piling brushwood against the ship apparently with the intention of trying to set it on fire."

"Oh dear! That's very bad. Are you making any headway with the rope, Group-Captain?"

Tiger spat out a mouthful of grass. "Given time I can do it."

"It's too late," rejoined Rex. "One of them is coming back."

The creature arrived. He snatched up Vargo with one hand as if he had been an empty sack and turned back to the ship.

"Can you see what they're doing with him?" asked the Professor.

"No, except that he's taking him to the ship. It looks as if they're going to put us all inside before they light the fire."

Silence fell. There seemed to be nothing more to say. Rex could feel his father tearing at the rope, but there was little he could do to help him. Still watching events he said, in a puzzled voice: "Something seems to be happening."

"What could happen?" asked the Professor, contritely.

"The fellow carrying Vargo seems to be rolling about as if he was ill, or drunk. Now he's dropped him, and is staggering as if he's likely to fall himself."



See <u>here</u>

The Face at the window

Rex watched. The man, stumbling and groping at the air, appeared to be making an effort to keep on his feet; but it failed, and just as he reached the ship he slumped to the ground and lay still.

Having told the others what had happened Rex said: "I can only think it must be something Nibo and Lesta are doing."

"Can you see them?"

"No. Nor can I see Vargo. He must be lying in the long grass."

Rex continued to watch. His astonishment mounted as another hairy native staggered out of the ship to fall flat on his face. Those who had been collecting brushwood, after behaving in the same way, also finished on the ground; not altogether but one after the other. They all lay near the ship; but there was still no sign of Nibo or Lesta. Nor could Rex see Vargo, who had been dropped, helpless, in the long grass. "This beats me," he said, passing the information to the others. "I haven't a clue as to what they're doing, or what's come over them."

"What an extraordinary business," murmured the Professor. "Could they have been tampering with the controls of the ship and gassed themselves, or something of that sort?"

"No," disputed Rex. "Some of them were nowhere near the ship when they started to stagger about."

"But they had been in the ship."

"Yes, I think so."

Tiger broke in. "I've done it! I'm through the rope. Shake yourself, Rex; you should be able to free yourself now."

Rex needed no second invitation. Without much difficulty he got rid of his bonds, and after that it was only a matter of a few minutes, working with his knife, to release the others. When this had been done they all stood up, staring at the ship as if uncertain about what to do next, their fear being, of course, should the natives recover and see what had happened they would renew their attack.

It was Tiger who was first to reach a decision. "I'm going to make a dash for the ship and get my rifle," he announced, crisply. "With that in my hands it will be a different story."

"Don't shoot the poor wretches," pleaded the Professor. "They don't know any better."

"Then it's time they were taught a lesson," declared Tiger. "As far as I'm concerned they're animals." So saying he set off at a run towards the ship.

The others followed in a straggling line. Rex stopping on the way to free Vargo, who thereupon joined them. Gator was calling "Nibo—Lesta." The answer came from inside the ship. Tiger was the first to go in. "They're here, tied up," he shouted, and came out loading the rifle. Rex, who still held his knife in his hand, went in and cut the two men free. Presently they were all standing by the door looking at the natives, who had not moved, but still lay sprawled on the ground, unconscious or dead; it was not clear which.

"What do you make of this, Doctor?" asked the Professor, adjusting his spectacles. "It's quite beyond me."

Toby stooped over the nearest man, rolled back an eyelid and felt his pulse. "He's still alive, anyway," he announced. "The thing is as big a mystery to me as it is to you. The only suggestion I can offer, not a very convincing one, is that they wolfed some of our food and it disagreed with them; knocked them out, in fact."

"They've certainly made a nice mess inside the ship," stated Rex.

"We can discuss this later," put in Vargo, brusquely. "I suggest we get away while we can. These men may recover, or others may arrive."

This being sound advice it was adopted without question, Tiger standing on guard with the rifle in his hands while the others cleared the brushwood that had been piled against the ship. When this had been done they all went in and preparations were made for departure, although with the danger past there was no urgency about this. Those not engaged at the controls began tidying up the ship, for what Rex had said about the mess was no exaggeration. Things had been thrown all over the place. Scraps of food lay with broken boxes and packets about the floor. Toby's medicine cabinet had been upset and the contents scattered.

He was picking up some tablets that had spilled from an overturned bottle when he let out a curious laugh and stood erect, holding up the bottle. "Here's the answer to the mystery," he cried.

"What is it?" asked the Professor, quickly.

"Morphine tartrate tablets."

"Good gracious! Don't say the silly fellows ate some of them."

"Why not? That's obviously what happened. They must have thought they were some sort of food. They wouldn't know any better. Quite a lot of the tablets are missing. This bottle was full. Now it's less than half full. Fifty, at least, have disappeared. They must have eaten them by the handful."

"What would be the normal dose?" inquired Vargo.

"Two."

"Then it looks as if they may have killed themselves."

"Not necessarily. Their strong physiques may save them. But they put themselves to sleep, and will stay asleep for some time. When they come round they'll wonder what happened to them—and to us. But there should be no serious after-effects."

"What a remarkable thing to have happened," observed the Professor.

"And what a stroke of luck for us," said Rex, fervently.

"You are right," declared Vargo, grimly. "We have had as narrow an escape as we shall ever have. I hope the lesson will not be lost on you, Professor."

"The next time my curiosity threatens to exceed my discretion I will remember this occasion," promised the Professor.

"I've heard you say that before," said Tiger, softly, with a wink at Rex.

"Now—now, don't be unkind," protested the Professor, reproachfully, pushing up his glasses. "It is the business of an explorer to take risks otherwise he would never get anywhere or learn anything." He smiled whimsically. "But I must confess those unpleasant-looking gentlemen gave me a fright. I really thought our last day had come, which would have been a pity with so many worlds left to visit."

"I don't care if I never see this one again," remarked Tiger, dryly.

"Yet you must admit it looked safe enough."

"It is not wise to judge by appearances," put in Borron.

"You have never seen this one before?" queried Rex.

"Never, and I don't expect to ever see it again. It must be one of those rare little planets that have an irregular orbit, otherwise it would be on my chart. I will put it on now, in its last known position. What shall I call it?"

"Our word meaning not long in the same place is Nomad," suggested Rex.

"Good. It shall be Nomad," concluded Borron.

The Tavona sped on towards its original objective, Mars.

CHAPTER III

THE FACE AT THE WINDOW

BEFORE reaching Mars, on a run that had by now become a mere routine flight, there occurred an incident which was to give Rex the fright of his life and at the same time present a mystery which for a while appeared insoluble. It was the uncanny nature of the thing that shook him, for with most people anything touching upon the supernatural produces not only shock but terror.

He was sitting back, gazing for no particular reason at the small round porthole in the upper part of the ship, the purpose of which was to permit astral observations above without tilting the *Tavona* as would otherwise have been necessary. This port, like the others at eye level, was filled with a thick, heavy, almost unbreakable kind of glass. He was thinking of things in general although subconsciously he was checking the constellations as they passed slowly across the window. This he did without any real interest; in fact, it might be true to say he was unaware of the object on which his eyes, purely by chance, happened to have settled.

To say that he suddenly became aware of it would be to say little. His eyes opened wide. His body seemed to freeze. He did not move. Indeed, at that moment, such was the force of the shock that struck him that he could not have done so. He did not speak. He simply stared at the window.

It was Tiger, who happened to be looking at him, who broke the spell. With some concern he said: "Are you all right, Rex?"

Rex gulped and moistened his lips, which had gone dry. "Yes. That is— I'm not sure." He spoke with difficulty.

"Are you feeling ill? You're as white as chalk."

"I'm scared stiff."

"Of what?"

"Something I've just seen."

"What have you seen?"

"I hardly like to tell you. It was something that couldn't happen."

"Talk sense."

Rex drew a deep breath. "A face just looked in at us through that upper window."

"Nonsense!" exclaimed the Professor, who apparently had been listening. "You've been dreaming, my boy."

"I was awake, wide awake," declared Rex. "I tell you I saw a face. It moved slowly across the window. The eyes were looking in."

The Professor pushed up his glasses and regarded Rex with a tolerant smile. "Are you suggesting someone is sitting on top of the ship?"

"I'm not suggesting anything. I'm only telling you what I saw."

"You haven't forgotten where we are?"

"No."

"And you still insist you saw someone."

"I saw a face. I saw it quite distinctly. Why should I say that if I didn't?"

"Hallucination, my boy, or a passing reflection of your own face caused by some trick of light as we moved at a different angle from the sun."

"Have it that way if you like," muttered Rex. "But the face I saw had something on it I haven't got."

"What was that?" asked Tiger.

"A beard."

"Can you see it now?"

"No. I saw it only for a few seconds but it was like no one in the ship. We were turning slowly at the time."

"How do you know that?"

"By the angle at which some stars were crossing the window."

"At last we have a haunted spaceship," murmured Toby. "Could you describe the face, Rex?"

"Roughly. It was horrible. Long and thin with deep-set eyes: all black and white, with a mop of hair on top and a straggling beard."

"Old or young?"

"Middle-aged, I'd say. It didn't look natural."

"You'd hardly expect it to, considering where you saw it," returned Toby, smiling.

"It's nothing to laugh at," asserted Rex, hotly. "It would have given you a fright had you seen it."

"I wouldn't deny that," admitted Toby, still smiling.

The Professor was not perturbed. "Obviously Rex saw, or thought he saw, a face at the window. Let us consider the matter practically. To begin with, it would be impossible for anyone to be on the outside of the ship."

"I saw someone," insisted Rex, doggedly.



See <u>here</u>

The Face at the window

"The alternative is, we collected this passenger somewhere in space."

Rex shrugged. "You work it out. I have no explanation to offer. All I can say is, I saw a face. I happened to be looking at the window and I distinctly saw a face pass across it."

"And all I can say is, that would be quite impossible."

"I've heard you say nothing is impossible," argued Rex.

The Professor sighed. "You make a point there," he conceded.

All eyes were now on the upper port, a disc of dark blue light, rather like deep moonlight.

"Well, there's nothing there now," said Tiger.

"The chap must have got tired and fallen off," suggested Toby, cynically.

"The boy was dreaming," concluded the Professor. "Or perhaps it was an optical illusion, the result of the shock we had on that last little place we visited—what did we call it?—Nomad."

Vargo entered the conversation. "If it was a reflection of some sort, given the same conditions in the same place the same thing would happen again. If Gator would go back it might settle the argument."

Gator was not enthusiastic. "Why waste time?"

"It would satisfy our curiosity, which would be a good thing, otherwise this argument may go on indefinitely."

"We're in no great hurry," put in Tiger.

"Very well," agreed Gator. "It shall be as you wish. I will go back some distance and return following the same course. There would be no difficulty about that."

Time passed. Everyone waited. All eyes were on the upper port.

Gator resumed. "We are now on our previous course. Very soon we shall pass through, or near, the same spot where Rex saw his apparition. If he saw his own reflection, distorted, he should see it again."

"I tell you the face could not have been mine," stated Rex, grimly. "I was motionless. The face moved."

"You haven't forgotten the amazing mirages we saw on Arcadia."^[5]

^[5] See *The Edge of Beyond*.

"They were the result of heat and smoke. There could be nothing like that here."

"Watch," said Vargo.

"This is like hunting for the Abominable Snowman in the Himalayas," remarked Toby. "Now we have an Abominable Spaceman."

No one laughed. Silence fell. There was not even a sound from the cosmic jets, no propulsion being necessary in an entirely negative region.

The hush was broken by the sharp intake of breaths as something dim and vague began to creep into the porthole. It became, quite definitely, a face, a face such as Rex had described. The eyes looked down into the cabin.

"There it is!" cried Rex, shrilly.

The face did not stop moving. It passed slowly across the window from one side to the other and then disappeared, leaving the usual disc of deep, blank blue light.

"Now what have you to say?" demanded Rex, triumphantly. He was no longer afraid.

"This is absurd," blurted the Professor, catching his spectacles as they slid down his nose. "There must be a simple and logical explanation."

Tiger was frowning. "That face was certainly not one of ours," he asserted.

The Professor turned to Gator and Borron. "This is your ship. Have either of you ever had this happen before?"

"Never," they both answered.

"Have you ever heard of this sort of thing happening in another ship?"

"No."

"Very strange," murmured the Professor, brushing back his long hair and opening a new tin of his own brand of caramels. He smiled whimsically. "It has at least provided us with a mystery to occupy our minds for the remainder of the journey."

"At least our ghostly visitor doesn't appear to be malicious," remarked Toby. "Let us be thankful for that."

"We shall have worse hazards to contend with at any time now," stated Vargo, sombrely.

"To what do you refer?"

"I am thinking of the time when your scientists on Earth start firing their clumsy rockets at other planets in our Solar System. The practice was dangerous enough when they aimed only at their moon. The indiscriminate launching of artificial satellites, as they call them, which they have no power to control, shows a complete lack of consideration for other people. For a world that calls itself civilized it reveals a gap in intelligence which we cannot understand."

"There is a school of thought that holds the belief that we are the only intelligent form of life in the Universe," said the Professor, sadly.

"It has provided Rolto with an opportunity to renew his demands for the immediate liquidation of the population of Earth, and more and more people agree with him. I am rather inclined that way myself. Your scientists are behaving like children with a new toy; but whereas children can only hurt themselves these madmen could do such mischief as they could not imagine. Once they achieve escape velocity space will be filled with missiles to the mortal peril of everyone."

"You are thinking of the possibility of collision."

"An uncontrollable missile, without an established orbit, must sooner or later come into collision with something, with results that could only be catastrophic. What is beyond our understanding is this: for years your government, supported by the scientists, has insisted that what you call flying saucers are a myth, while all the time they are themselves experimenting with similar devices. Why this hypocrisy? If they don't believe in spaceships why do they try to make them? Why do they waste time and energy attempting what they declare is impossible? Tell me that?"

"It may be that they prefer to allow the truth to leak out gradually rather than frighten people with the thought of interplanetary war."

"That is no excuse for behaving as though the Universe belonged to them. You will soon have to expose the facts."

"And make myself a laughing stock! No serious-minded man, as I hope I am, likes to invite ridicule. The people will know the truth one day."

"If Rolto has his way they'll never know. In one short flash they would all be burnt to cinders. Terromagna could destroy all life on Earth in a dozen ways. It could poison your atmosphere. Remember what they did to that ambitious planet Ardilla."

"I must admit you have cause for complaint. But at present our artificial satellites are quite local."

"You reach farther into space with every new experiment. If you don't end by destroying yourselves, as seems highly probable, you will destroy other people. With what you do to yourselves we are not concerned, but the mischief you may do elsewhere is the concern of everyone in the Galaxy."

"I suppose one day I shall have to reveal what I know to save the unfortunate people of Earth, who have no say in what is going on, from the wrath of Rolto," said the Professor, moodily. "I will consider the matter and perhaps speak to Rolto about it."

The journey to Mars was continued, and concluded without any event worth recording except for a minor collision with some specks of meteoric dust which caused an alarming noise but did no damage. This was a fairly common occurrence, however, and passed almost without comment.

Nothing more was seen of the Face at the Window, as Toby had facetiously dubbed the apparition; but it remained a subject for discussion
for the remainder of the trip. No satisfactory explanation of the mystery was found.

This came later, in somewhat comical and certainly unexpected circumstances, within a minute or two of the ship landing on the Martian astradrome of Utopia, the capital town and administrative headquarters of the Committee of Restoration. As they all stepped out of the *Tavona* a man in the uniform of a spaceship commander, who looked as if he had been waiting for them, came forward.

Vargo introduced him as Pavlo, a spaceship pilot who for some time had been engaged on the shuttle service between Mars and the planetoids on which refugees of that planet had lived since the explosion on Kraka which had depopulated Mars at some period in the remote past.

Said Gator: "I expect he wants to thank me for lending him the *Tavona* the other day while his own ship was being overhauled. He had to make a trip to one of the more distant planetoids to see if anyone was living on it." Turning to Pavlo he went on: "Can I do something for you, Pavlo?"

"No, thanks," was the answer, in Minoan, of which by now they all had a fair knowledge. "But I left something in your ship the other day when you were kind enough to lend it to me. I forgot to bring it out. Do you mind if I collect it?"

"Not at all."

Pavlo went inside and presently emerged carrying a piece of white material that might have been cardboard.

"I see you have found it," said Vargo, casually. "What is it?"

"Merely a sketch I made of one of the men on that planetoid I visited. I did it for comparison with other types in the Record Office to see if their original home could be located."

"Show me."

Pavlo showed his drawing.

For a moment there was silence. Then Toby burst out laughing. Rex could only stare, for the sketch was a well-executed picture of a face, in black and white chalk. It was the face he had seen at the window.

"Where did you leave that?" asked Vargo, in a curious tone of voice.

"On the top shelf."

"Face upwards?"

"Yes. I didn't want it to be smudged. Why do you ask. Had you a reason?"

"Yes, and a good one," returned Vargo. "That face gave us a rare fright."

"How?"

"In some queer way, presumably by a trick of light when we were in a certain position, that face was reflected in the upper port window. It provided a mystery which, not knowing your sketch was there, we were unable to solve."

The Professor sighed. "All so simple, after all."

"Perhaps," murmured Vargo. "But remember, we didn't know the picture was there, and we wouldn't be able to see it from floor level."

"We thought it was a ghost," put in Rex, lamely.

"Speak for yourself, my boy," requested the Professor, curtly. "I never did accept the supernatural explanation. Everything is natural, even the supernatural, which is merely the word applied by men on Earth to natural laws which so far they have been unable to comprehend. In this case I am glad the explanation has been forthcoming. I confess I was puzzled."

Tiger grinned. "At least it gave us something to talk about and helped to pass the time."

Looking at his sketch critically Pavlo resumed: "This man himself, a member of a strange race, also provides a problem not easy to solve, although not as great as one I found on another planet at which I called while on my mission. I am under orders to return and study the matter more closely, but I shan't need the *Tavona* again as my own ship is once more in service."

"What, and where, is this new problem?" inquired the Professor, eagerly. "Here we go again," breathed Tiger.

"I came upon as strange a phenomenon as I have ever——" began Pavlo, but broke off when a boy arrived with a message. "I'm sorry, but I can't stop to tell you about it now," he went on, quickly. "The fleet commander wants to see me urgently. I may tell you about it later." He hurried off.

"How very annoying," muttered the Professor, brushing back his hair with his fingers. "To arouse my curiosity like that, and then——"

"I think that message may have arrived just in time to save us a lot of trouble," interposed Vargo, quietly. "I suggest it would be wise to wait until Pavlo has again visited this planet and then invite him to tell us all about it. In the meantime let us go to the guest-house and have something to eat. After you have seen here all you want to see I would like to move on to Mino, where I hope to see Multova of Terromagna." "Is he coming for any special reason?" asked the Professor, as they walked on.

"He promised to let me know, as soon as he knew himself, the secret of the extraordinary long life of the people of Dacoona. You will remember him telling us, on your last visit, about these remarkable people, and the experiment the doctors of Terromagna hoped to make to solve the mystery."

"I remember very well," returned the Professor.

"And as a doctor myself I would very much like to know the answer to that one," said Toby.

"We shall know, I hope, when we get to Mino," concluded Vargo.

CHAPTER IV PECULIAR GOLCANA

THAT the *Tavona* did not continue its journey to Mino as quickly as had been proposed was a matter of luck, or fate, although it must be admitted that for this the Professor was partly responsible. In a word, it was the result of an accidental meeting with Pavlo, the space captain who had left the picture in Gator's ship.

The party had spent two days on Mars, sufficient time for them to see how the work of irrigation and land reclamation was progressing, and were actually on the astradrome walking towards the *Tavona* ready for embarkation when who should they run into but Pavlo, also walking towards his ship, a beautifully finished machine, fresh from its overhaul, named *Miconda*. Greetings having been exchanged, Pavlo happened to remark that he was just setting off for Golcana, the little-known planet he had mentioned and had been ordered to survey.

That, of course, was enough to set the Professor's eyes sparkling. "How long do you think you will be away?" he asked, taking care not to look at Vargo, who was shrugging his shoulders helplessly, knowing the purpose of the question.

"Not very long," replied Pavlo.

"I suppose you haven't room in your ship for another passenger?" said the Professor, wistfully.

"Why? Would you like to come with us?"

"Very much. To me an unknown planet is a magnet."



"There's plenty of room for all of you," went on Pavlo, obligingly. "Or perhaps you would prefer to stay with Vargo, who could follow me in his ship."

"No, thank you," returned Vargo, promptly. "I have no time to waste on enterprises that promise more danger than useful information. But if our friends from Earth would care to go with you I have no objection. There are several things I could do here while waiting for their return, and I have no doubt that Gator would welcome the opportunity to look over his ship."

"That would suit me very well," confirmed the Tavona's captain.

"Capital!" exclaimed the Professor. "In that case, Pavlo, we will accept your kind invitation. I'm sure I can speak for the others."

"We shall be happy to have you with us," confirmed Pavlo.

The Professor continued: "When you were called away the other day you were about to tell us of some peculiarity of this planet at which you had made a brief visit."

"Yes. Golcana. I saw there one of the strangest things I have ever seen, something I have noticed nowhere else."

"Tell us about it now."

Pavlo smiled. "No. Let us leave it to see if you observe this strange thing. The suspense of not knowing will give an added zest to your visit."

"As you wish," agreed the Professor. He turned to Vargo. "You'll wait here for us?"

"Of course. But don't be too long away or I may miss Multova."

"Then let us not delay any longer," said the Professor to Pavlo. "We are ready if you are."

Pavlo led the way to his ship. They all filed in, and within a few minutes were on their way to the peculiar world of Golcana.

The journey, like most voyages through actual space, was uneventful, the hazards being fewer than those an ocean liner on Earth might encounter between ports of call. Such a vessel might have to fight its way through storms; but in space there is no air, therefore no wind, and no storms. The peril of rocks in the sea was represented in space by meteorites, and here, admittedly, an ocean-going ship was at an advantage in that dangerous rocks and reefs are charted. Meteorites could not be charted. Always they could occur anywhere. Rex had long ceased to worry about them. They were a risk that had to be, and always would have to be, accepted.

Pavlo still did not volunteer any information about the planet he intended to visit. All he would say, and this with a twinkle in his eye, was that the place was inhabited; the people had a peculiarity but it would be a waste of time for his guests to anticipate just what that was. What was more important from Rex's point of view, he did give them an assurance that the people were harmless. From what little he had seen of them they appeared to be a timid race. They spoke a language of their own, for which reason, on the occasion of his previous visit, conversation had not been possible. As far as he was aware there were no physical dangers to be feared. This was a relief to Rex and he made a remark to that effect. This brought from the Professor the comment: "The worst that can happen is death; and while I have no wish to die while there is so much of interest to enjoy I have never been able to understand why anyone should be afraid of death, which must come to all of us sooner or later. We all have our turn and pass on, which is as it should be, because it gives the next generation a chance. But I fancy we are approaching our destination so let us turn to the more pleasant prospect of the present, and what lies before us."

Pavlo having confirmed that the globe now rapidly becoming larger was the peculiar planet of Golcana, all eyes were focused on it, and remained on it while the ship, checking its fall as it drew near, gave the watchers an opportunity to study its physical features. Broadly speaking, it appeared to Rex to be a normal world of hills, plains and valleys, with an abundant vegetation. Quite a pleasant-looking place, in fact. But he could see nothing of an artificial nature, which would of course denote human occupation, except a cluster of very primitive wooden structures which he took to be dwellings—of a sort. Near them was some ground which looked as if it might be under cultivation. Here one or two people were working, although when they heard the vibrant drone of the *Miconda*'s jet brakes they dropped their tools and ran for cover, thus confirming Pavlo's belief that the people were timid by nature.

The existence of homes and field work did at least indicate a reasonable standard of intelligence, thought Rex, even if they took alarm at the sight of the spaceship. But that, he reflected, could well happen on Earth, recalling that in the early days of ballooning, aeronauts landing in country districts were received with open hostility, the peasants believing the visitors had arrived from another world.

"There is no need to make atmospheric tests," informed Pavlo. "I made them the last time I was here and found the air comfortable both in density and temperature. We will go straight down and land on the open ground near the village."

A few minutes later the *Miconda*'s feet were resting on the spot indicated, with everyone inside gazing out curiously through one or other of the windows.

Rex could see some of the people watching the ship from a clump of bushes not far away. Turning his binoculars on them he noted men, women and children; but he could see nothing remarkably abnormal about them. They were a little short in stature, otherwise well built. Their skins were fair, as was their hair, which was worn long. All wore the same clothes of what appeared to be woven grass, or straw. There was certainly nothing remarkable that they should be dressed alike, thought Rex. In almost any country on Earth people wore similar garments.

What did surprise him, now he could observe the houses closely, was the astonishing solidity of their structure. It was true they were built of wood, but there was nothing flimsy about the timber used. On the contrary, the houses, rough though they looked, were composed of whole trees, and that included the roofs. At the time he noted this Rex assumed the reason to be lack of tools to square the timber; but before very long he was to feel he should have realized the truth, or sought a more practical purpose to account for the erection of such dwellings.

The matter passed from his mind when Pavlo opened the doors and stepped out, whereupon the natives, finding the ship did them no injury, came nearer, slowly, and a little apprehensively. They stood in pairs, but Rex took this to be purely accidental.

Said Pavlo, speaking to the Professor: "Have you noticed anything out of the ordinary?"

"No."

"I have," said Rex. "But it may not be the peculiarity you mentioned."

"What is it you see?"

"The people stand in pairs."

"You are only half-way. Try again."

"I've got it!" cried Rex. "Either I'm seeing double or these people exist in pairs. At least, they're so much alike that they might be identical twins."

"That's right," said Pavlo. "Every man and woman has an exact counterpart."

"What we would call a double," put in Toby. "How extraordinary."

"They're certainly so much alike that it would be impossible to tell them apart," observed the Professor. "How very remarkable. I imagine they must in fact be twins. I can think of no other explanation."

"That is what I have come to investigate," said Pavlo. "Not knowing the language it may be difficult."

"How the dickens do they manage?" questioned Tiger, wonderingly. "This state of affairs must lead to difficulties, if not confusion."

"Let us try to make contact with them," suggested Pavlo, stepping forward. "The first thing is to gain their confidence by letting them see we mean no harm."

It did not take long to establish friendly relations with the little community, although the people bore such a resemblance one to the other that it was almost impossible to keep in touch with any one of them: or to put it more plainly, Rex having taken his eyes off a man could never be sure he was looking at the same man again. The Professor distributed some of his caramels, and from the satisfaction with which they were eaten, with much lip-smacking, it was supposed that the sweet taste was something new on Golcana.

But as Pavlo had predicted, the language difficulty was not so easy to overcome, although a little progress was made by simple signs; not enough, however, to confirm the "twins" theory. It was noticed that the pairs that were alike in appearance not only kept together but often acted alike, sometimes simultaneously. Toby was of the opinion that they merely copied each other, but the Professor held the view that they could not help themselves. Their brains worked together, so everything they did was in unison. To make matters still more difficult a great many of the pairs were alike, presumably being members of the same family if not children of the same mother and father.

The pantomime of trying to talk by means of hand signals came to an abrupt end when a shrill cry from an old woman sent all the natives scuttling towards their houses. Rex had noticed this old woman sitting alone on a high perch, a crude openwork structure of rough timber, and observed that regardless of what was going on below she never for a moment took her eyes off the sky. Having given the cry she came down smartly, hand over hand, and joined the throng, many of whom were also snatching anxious glances at the sky.

"Now what's the trouble?" said Tiger.

"That was definitely a cry of alarm," averred the Professor.

"There's danger, somewhere near, although it may not affect us," opined Pavlo.

"I think that may be it," said Rex, carelessly, pointing at the sky.

At the cry he had looked up, but what he had seen had not disturbed him. They had landed in fair sunshine, but now a dark, ominous-looking cloud was racing up from the horizon. But it was, after all, only a cloud, and he had seen approaching thunderstorms on Earth look more threatening. With the ship not far away to offer cover from the rain he could see no reason why they should even get wet.

"It looks like a storm blowing up," he observed.

"It may be severe," said Pavlo. "The people are trying to induce us to take shelter in their houses."

Most of the people had by this time disappeared, but one or two men could be seen on their thresholds beckoning urgently.

"Our friends seem to be pretty scared, anyhow," put in Toby.

"It may be that they don't want to get their grass shirts wet," contributed Tiger. "I imagine they would take some time to dry."

"A pity," remarked the Professor. "I was just making progress with an exceptionally intelligent fellow, and now I may not be able to find him again."

"It might be wise to accept their invitation to go indoors," suggested Pavlo. "I have seen strange things fall from the sky."

"So have we," asserted Rex, remembering the ice storm on Petroconda.^[6]

[6] See *The Death Rays of Ardilla*.

They walked without haste to the nearest house, but did not go in, for the smell was rather offensive. Rex looked in and saw that it comprised one room only, a large one. What astonished him was there was no one in it, although he had seen several people enter. The explanation was provided by the projecting top of a ladder, which gave access, through a hole in the floor, to what was evidently an underground room.

"These houses have basements," he told the others, rejoining them.

"For what possible reason?" wondered the Professor. "They're not short of ground space. There must be a reason for it."

"Air raid shelters, maybe, ready for interplanetary war," joked Toby.

The cloud continued to climb. They watched it until it was nearly overhead, by which time the owner of the house had disappeared.

"That man lives here," said Pavlo, frowning. "He knows something. I have an idea there's going to be a downpour, and it will be no ordinary storm. It would be wise, I think, to get inside the ship before it breaks."

"I agree," replied the Professor. "This wind, and sudden drop in temperature, is not very comfortable."

Hardly had the words left his lips when they all recoiled from a flash of lightning of such intensity that for a moment Rex thought he had been blinded. With it came such a crash of thunder as he had never heard. It was now clear why the natives had sought the shelter of their houses, although, oddly enough, no rain fell. In the expectation of it they backed into the doorway, and from there, half deafened by the rolling thunder, watched an almost incessant play of blue lightning. It was only when Rex saw a solitary tree riven from top to bottom that he realized they might be in danger.

"I have seen electrical storms but never one like this," declared the Professor.

Watching, they saw the two crewmen, who had been left to guard the ship, jump out, run a little way and lie flat on the ground.

Said Tiger: "They're taking no chances. I wouldn't care to be near anything metal with this going on. I'd rather be here than in the ship. Just look at that lightning!"

There was no need to ask anyone to look, for blue forked flashes seemed to be raining from the sky, sometimes tearing up the ground where they struck. Through such an uproar as seemed to shake the planet Rex heard the Professor cry: "What an incredible spectacle!"

Rex was about to suggest they joined the natives in their dug-out when it happened. There came such a flash that caused him to stagger, his hands instinctively going to his eyes to protect them. The noise sounded as if the planet itself had been torn apart.

Tiger was the first to recover. All he said, in a stunned voice, was: "Look."

They all looked at the object at which he was pointing.

It was the ship. Or what had been the ship. It was now a heap of twisted, smoking metal.

No one spoke.

So this was it, thought Rex, going cold. It was what he had always feared more than anything else. It had nearly happened before. Now it was a fact. They were marooned, stranded on an unknown planet.

CHAPTER V

MAROONED

THE irony of the catastrophe was, from that moment the storm began to abate, or move on.

It was a little while before anyone spoke. As far as Rex was concerned there seemed to be nothing to say. Standing there, in a semi-daze, gazing at the wreck, he remembered that not long before the Professor had said the worst that could happen to them was death. At the time he would have agreed; but now he was not so sure. To live, but spend the rest of his life where he was, in the same primitive conditions as the inhabitants of the planet, might be worse. The thought appalled him. With a flicker of interest he saw the two crewmen, who had so narrowly escaped being destroyed with the ship, rise up from where they had been lying, stop to look at what was left of the *Miconda*, and walk on slowly to join them. They had nothing to say, either. They looked shaken, which was hardly surprising.

The natives now reappeared, laughing and jabbering, some returning to their work in the fields. They had lost nothing by the storm, thought Rex, bitterly. He gathered the impression that they saw nothing unusual in it. But if the village had not suffered the ground around it had. It was smoking in several places where the lightning had struck, for there had been no rain to quench any fires. There were scars where the thunderbolts had torn up the ground. They all walked a short distance to one such spot. Stooping, Rex picked up a piece of discoloured rock that had been unearthed. It was still warm and exceptionally heavy.

"Feel the weight of that," he invited, handing the rock to the Professor, who pushed up his spectacles to examine it closely.

"Ironstone," he said. "The entire planet can hardly be metallic, in which case it would seem that these ignorant people have chosen the worst possible spot to build a village. The metal in the ground would of course attract the lightning. That may be why it was so devastating here."

"Never mind the natives, what are we going to do," asked Tiger.

"Isn't that rather an unnecessary question, Group-Captain?" inquired the Professor, looking over his glasses. "There is nothing we can do except make ourselves as comfortable as circumstances permit."

"What I really meant was, are we going to stay here, at this village."

"Is there any alternative?"

"I was thinking there may be other, larger and better places. These few people here can't be the entire population of the planet."

"Agreed, but we do know they are friendly, which may not be the case with others. To use a rather threadbare expression, we might go far and fare worse."

This was supported by the behaviour of the natives. They had at least the intelligence to realize that the visitors having lost their conveyance, had no means of leaving, for with a good deal of noise and gesticulation indicated a house, apparently unoccupied, which they could use.

The Professor thanked them as well as he was able to. "Nothing is more futile than to cry over spilt milk," he observed, tritely. "Let us be thankful that we escaped that dreadful lightning and have fallen among friends. Things might have been worse, much worse."

Before doing anything else they walked to the remains of the *Miconda*. It was a complete wreck, with everything except metal objects burnt to a cinder. Even the metal objects had been warped and twisted almost out of recognition.

"The electricity discharged in that single flash must have been beyond computation," declared Tiger. "There's nothing here worth saving. I'm glad I took my rifle with me when I went out." This was, in fact, the only object they possessed that had escaped destruction.

"I'm afraid you're right, my dear Group-Captain," agreed the Professor, sadly.

So saying he led the way to the house that had been put at their disposal.

It was not all that could have been desired, but it was at least a roof over their heads, with the usual storm-shelter under the floor. As they looked around Pavlo struck an optimistic note by remarking that Vargo knew where they were going and could be expected to come looking for them when they failed to return.

"The question is, will he be able to find us?" said Rex.

"I think so."

"You only *think* so," returned Rex, looking horrified.

"He knows roughly the position of Golcana for I explained it to him. But we must bear in mind that it will have moved an unknown distance along its orbit by the time Vargo realizes we have met with an accident. Even so, Borron, who is an expert navigator, should be able to track it. He knows this section of the Second Region as well as he knows his home town." Rex was looking at the furniture with which the room was equipped. There was not much of it, and what there was looked a poor example of doit-yourself. There was a central table on which stood a few pieces of crude pottery of a type that might have been developed by a very early civilization. A seat ran the length of the walls except where a cavity filled with ashes indicated the fireplace. Matting of plaited rushes covered the floor and also hung over the entrance in lieu of a door. Rex remarked that there was not a single metal article in the room, to which the Professor replied that the people had obviously not yet reached the Iron Age although there was an unlimited supply of that metal under their feet.

"Imagine what a difference it would make to them if they knew how to smelt and work it," he concluded. "If we are here for any length of time we must try to teach them."

"How do they put their houses and their furniture together without nails?" questioned Toby. "They don't appear to be tied."

Investigation revealed that things were held together by a gum, clearly of great strength. "It must be derived from a tree of some sort," asserted the Professor. "We must ask them where they get it."

Tiger came in. "Instead of fiddling about with things that don't matter I think the first thing we'd better do, since we seem doomed to play Robinson Crusoe, is to follow the usual practice of castaways and build a whacking great bonfire ready to show Vargo where we are when he comes over in the *Tavona*. Without a signal he might search the whole planet and not find us."

"A practical suggestion," agreed the Professor. "The second most important thing will be to learn the language of our hosts as quickly as possible. Until we can talk to them life here will not be easy. We shall, for example, have to speak to them about those two indispensable commodities, food and water. Meanwhile, let us start work on the bonfire, in case our good friend Vargo should appear. Perhaps the natives will help us if we can make them understand what we're doing."

Thus began the sojourn on the minor planet of Golcana, into which the explorers settled more easily than might have been expected. Not that they had much choice. Their hosts went out of their way to make them comfortable, providing them with all the food they needed. This consisted of the boiled meat of small animals, all unknown species, which they caught with snares in the woods. The stream that provided water also yielded small fish, caught with nets, ranging in size from minnows to sprats. These were rather tasteless but made a change of diet. There were plenty of vegetables, both green and roots, and a variety of fruits which grew wild. Grass seeds were pounded into a paste to form a gritty but not unwholesome sort of bread.

On the advice of Pavlo, who had sampled food on many worlds, at first they ate sparingly, particularly in the case of fruit and vegetables, which, it was thought, might make them sick or even poison them, although the natives, from long usage, would be able to eat them with impunity. However, any fears in this direction were soon dispelled when it was found they suffered no ill-effects.

By the third day, when they were visited by another electrical storm which confirmed the belief that this was a frequent occurrence, some progress had been made with the language. Like all primitive languages it was of the simplest possible construction with a small vocabulary that covered only the essential things of life. The big problem, as had been anticipated, was the one of recognition, but this soon solved itself in a manner so elementary that it gave them a laugh.

At first they were all puzzled by the fact that the natives seemed to recognize each other instantly, on sight. As soon as he was able to speak a few words Rex asked a young pair of twins with whom he had become friendly how they managed to do this. The boys looked surprised at the question and pointed to tattoo marks on their shoulders, which were exposed. The marks were different. Then of course Rex understood. No further explanation was necessary.

Smiling, for the explanation was so simple that he found it amusing, Rex took this information to the others. "I've discovered how our friends recognize each other without any possibility of mistake," he announced.

"How do they do it, for I'm dashed if I can tell one from the other," replied Tiger.

Rex grinned. "Each carries his own identity card."

"Do you mean a written document?" inquired the Professor, looking astonished.

"Nothing so complicated," answered Rex. "All these identical twins, men and women, have a device tattooed on the shoulder. I gather these are put on soon after they're born, so they're marked for life."

"Well, blow me down!" exclaimed Toby. "I've noticed those marks and assumed they were purely for decoration."

"Dear—dear! How slow we have been," murmured the Professor. "With so many people so much alike I simply could not imagine how families, particularly husbands and wives, managed to get along without arguments about who was who." "I've been talking to some boys about it," went on Rex. "As I understand it identical married couples produce identical twins, so you may get up to a dozen or more people all looking exactly alike."

"Quite obviously something would have to be done about that or their lives together would have become one long series of misunderstandings. The method employed to prevent that is so simple that we should have perceived it. Well—well. Other worlds, other ways. What shall we discover next? I had come to the conclusion that the difficulty of recognition was the reason why there appears to be no chief here, as you may have noticed. That again is most unusual. On Earth, and everywhere else we have been, every tribe, however small or remote, has its headman. Here no one seems to be in charge."

"They seem to get along all right without anyone to boss them about," observed Tiger.

"In that respect either they are lucky or clever," asserted the Professor. "I suspect their troubles will begin when someone decides to appoint himself Dictator. At present they seem to be a perfect little community, everyone helping everyone. An ideal little democracy, in fact."

It soon appeared that the identification problem had been solved only to be replaced by another. It arose on the fifth day, by which time a limited amount of conversation had become possible, when Pavlo made the staggering announcement: "Have you realized that these people have a sixth sense?"

"Preposterous!" snorted the Professor. "A sense beyond the five we possess is impossible to imagine. I know people talk about a sixth sense but it is nothing more than what, for want of a better word, is sometimes called instinct, or intuition."

"I would argue with you about that," said Tiger. "I have heard that if you put a camel in the middle of a desert, where it has never been before, it will at once start walking the nearest way to water. And I know for a fact that if you pick up a young turtle and drop it in the middle of an island it will take the shortest route to the sea, even though it can neither hear, see, nor smell the water. If that isn't a sixth sense what is it?"

"That is too difficult a subject to discuss now," declared the Professor. "Let us hear from Pavlo what extra sense it is that the people of Golcana possess."

"It is different from the one that has just been mentioned," said Pavlo. "I will tell you of something that has happened and you can draw your own conclusions."

"Pray proceed," invited the Professor.

"This morning," began Pavlo, "I walked with my crewman Caudio to the river to fetch water, taking the wooden buckets with which our friends have provided us. To reach the river, to make the walk more interesting, we went through that rather dense piece of forest where the natives do much of their trapping. Beyond it, on the bank of the river, there is a belt of tall rushes. We neither saw nor heard anyone. In fact, I am sure there was no one there. It is important to remember that. So we came to the river.

"While leaning forward to fill his bucket Caudio slipped on the muddy ground and fell in. We both saw the funny side of it and had a good laugh. Having got Caudio's clothes fairly dry we picked up our buckets and started back. Again we saw no one until we had nearly reached the village. When we met two natives, with their nets, apparently going to the river to fish. We exchanged greetings and they went on. So did we. To make myself clear, the spot where we met was certainly not less than what you would call a quarter of a mile from the river."

"What you mean to convey is, they could not have seen the river from where you met them."

"Exactly. We went on a little way and then sat down to rest. Being in no hurry we sat there for some time. After a while we saw the same two natives coming back. They were laughing. When they came up to us I asked them what they were laughing at. What was the joke? Imagine my surprise when they told me it was because Caudio had fallen in the river."

"Why were you surprised?" asked Rex.

"Because they knew about the incident. They could not have known about it when they were on the way to the river or they would have mentioned it then. But now, on the way back, they knew. How did they know? They could not possibly have seen the thing happen; and no one could have told them because there was no one there. Naturally, I said to them, how could you know about my friend falling in the river? You were not there. No, answered one, but we were there soon afterwards and of course *we saw your outlines*."

"They saw your footsteps in the mud," suggested the Professor.

"They did not say that. They said they saw our outlines."

"What did they mean by that?"

"I don't know. I asked them. They looked at us as if they did not understand the question. All they could do was repeat they had seen our outlines, as if that was sufficient explanation. I said, 'Did you know this when you passed us on the way to the river?' They said, 'Of course not. We had not been to the river.' I said, 'Then you must have seen us at the river, or must have met someone who saw what happened.' This they denied in a manner which suggested we were fools. They kept repeating, 'We saw your outlines.' I said, 'After we had gone?' They said, 'Of course.' Well, there it is," concluded Pavlo. "They did not see us at the river; but they knew what had happened. How did they know?"

"When they saw what they called your outlines you were in fact nearly back at the village?" said the Professor.

"Yes. Yet they obviously saw something. What did they see?"

"They saw your outlines," quipped Toby.

"Can you see the outlines of people when they are not there?" challenged Pavlo.

"No," admitted Toby.

"Hm," murmured the Professor. "How very strange. What is your opinion of this, Pavlo?"

"It is beyond my understanding. All I can think is, these people have some power that we have not. That is why I called it a sixth sense. Can you offer any explanation?"

The Professor considered the question. "Obviously there must be an explanation because nothing can happen without an explanation. I can think only of two. Either our friends were playing a trick on you, claiming powers they do not possess or they have an incredible hyper-sensitive form of sight."

"Are you asking us to believe they can see things that aren't there?" queried Tiger, cynically.

"I did not say that. What they saw could have been something which we, without their peculiar vision, could not have seen."

"That doesn't make sense to me."

"Maybe not, but apparently it makes sense to the people here. The common answer to things we do not ourselves understand is they do not make sense. In this case, by stretching the imagination, I suspect that a combination of heat, light, and a high humidity such as we have here could produce an effect which only an abnormal vision would be able to perceive."

"I don't get it."

"Then I will try to explain what is in my mind. Human bodies are warmer than the air in which they move. They might therefore, create vague outlines which would in fact be areas of rarified air. I don't say it is so, but if that is the case the eyes of these people may have developed a supersensitive ability to register minute differences of gradations of light caused by the difference in the varying degrees of rarified air. If so, they would be able to see something that had once been present but had become a thing of the past. I imagine such conditions, if they did occur, would not last long."

"That sounds pretty far-fetched to me," retorted Tiger.

"Of course it does. So do a lot of things beyond our physical ability to grasp them. But why should this be so remarkable? After all, even *we* can see the effect of different densities of air, particularly on a hot day, when by distortion an object in the distance can give an illusion of movement. You must have noticed that. A higher degree of visual sensitivity than we possess might see more. It might detect an effect on the atmosphere caused by an object of a different temperature passing through it. In the present case the object would be the bodies of Pavlo and Caudio."

Tiger shook his head. "This is getting beyond me. The change of temperature caused by a body would be infinitesimal."

"I would not dispute that. What of it? Think of your sense of smell. Have you ever thought what a minute particle of material is required to register on the brain by this sense? A perfume can linger in the atmosphere for hours after the person wearing it has gone. So can an offensive smell remain after the object causing it has been removed. To carry the example further, think how sensitive the nose of a dog must be when it is able to track a man, or any other creature, long after it has gone. To smell a rabbit you must put it to your nose. A sporting dog can smell it ten or even twenty yards away. That wonderful dog, the pointer, will point with his nose at a partridge or grouse forty or more yards away. And what of a bloodhound, able to follow the scent of one particular man even on the following day? We can't do these things, yet there are creatures which can. Our noses are not adapted. Theirs are. Why should not the same thing apply to the sense of sight? If so, why should not our friends here have developed this peculiar faculty? Remember, this is not the first time we have encountered physical powers different from our own."

"Would you call that a sixth sense?" asked Rex.

"Certainly not. I would call it a phenomenal extension of an existing sense."

How the discussion would have ended is a matter for surmise, but at this juncture it was brought to an abrupt close by such a screeching that the party sprang round in alarm. The villagers were rushing about obviously in a panic, women dragging their children and carrying bundles of household goods, men pouring into their houses to reappear armed with spears, although these were no more than long shafts of wood pointed at one end. There was a general stampede towards the forest.

"What the dickens is going on?" cried Tiger.

"The people are obviously terrified of something," said Rex.

Pavlo caught the arm of a man as he ran by. "What is it?" he asked. "Why are you running away?"

"Bad men come," was the terse answer. Tearing himself free the man raced on.

"So our friends are not the only people on the planet," said Pavlo, looking worried. "They have enemies."

"We should have asked them about that," muttered Toby.

The Professor groaned. "War! Always war, everywhere, even here. It really is lamentable."

"We had better see about doing something before we have real cause to lament," advised Tiger, grimly.

They looked around. There was not a soul in sight. The entire village had been evacuated.

Rex strode towards the high perch that was used as a look-out for approaching storms. "I'll see if I can see anyone," he said. "I should be able to get a wide view from the top."

CHAPTER VI THE RAID

Rex clambered up the rough timber trellis to the top, from where, as he had anticipated, he obtained a fair view of the surrounding country. With no roads and no houses it all looked wild, and at first he could see nothing unusual. In the absence of large animals it appeared to be lifeless. Then a movement, in a shallow depression that meandered across the open country beyond the village, caught his eye, and after a comprehensive stare he was on his way down even more quickly than he had gone up.

"There's a party of men coming down the valley towards the village," he told the others, tersely, when he rejoined them. "They're coming from the direction of that range of hills we can see in the distance."

"The old story," said Tiger. "Hillmen all seem to think the dwellers of the plain are their legitimate prey. How many of them are there?"

"I didn't stop to count them but I'd say between twenty and thirty."

"How far away are they?"

"About half a mile, perhaps less."

"What do they look like?"

"Much the same as the people here. They're wearing the same sort of clothes, this thin coconut matting stuff. They're carrying what look like spears and clubs. They're not making any attempt at concealment so they must be pretty sure of themselves."

"And they're coming straight towards the village?"

"Yes."

"Hm. A raiding party from another tribe, I imagine. From the behaviour of our friends they know all about them. If not a regular thing, this must have happened before."

"Dear—dear, this is going to be awkward," murmured the Professor, shaking his head. "We can assume these men are hostile or our friends would not have abandoned the village. What had we better do about it? Follow them into the forest?"

Tiger frowned. "I don't like the idea of bolting like a rabbit at the first sign of trouble. I might be able to turn them back with the rifle. I haven't much ammunition, but what I have should be enough to give them a fright." The Professor looked pained. "You know I don't like that sort of thing."

"And I don't like having a spear pushed into me, or my skull bashed in," retorted Tiger, curtly.

"What is their intention, I wonder?"

"You needn't wonder long about that. The usual intention of raiders, no doubt. Loot, and the capture of prisoners for slaves."

"We could retire into the forest and hide until they've gone."

"That would mean abandoning the village to whatever these toughs cared to do with it. They would probably burn the whole place down. That would be a poor return for the hospitality we've been shown here."

"True—true," conceded the Professor. He turned to Pavlo. "What do you think?"

"I would wait to see what they intend to do. When they see us here they may turn back."

"That's taking a chance," declared Tiger. "If they didn't turn back we should be in a mess. I'm in favour of giving them a shock by launching a surprise attack. They won't be expecting anything like that. We might give them such a fright that they'd think twice about ever coming back here again, in which case we would have done our friends a good turn."

"How would you give them a fright?"

"By knocking one or two of them over. They can't know anything about firearms so they wouldn't have a clue as to what was happening. The mere report of the rifle should be enough to shake them."

"You think this raiding is a regular practice."

"I do."

"Why don't the people here put up a resistance?"

"They probably know from experience it doesn't pay. Plainsmen are seldom a match for hillmen when it comes to fighting. Well, what are we going to do? We shall soon have to make up our minds."

"You think these invaders should be taught a lesson?"

"I do. Tough methods now might be the means of saving lives in the long run. Pacifism won't help our friends and it won't do us any good."

The Professor sighed. "Very well, Group-Captain. I leave it to you."

"All right. In that case let's get ready. I'll stay here under cover and hold my fire until I'm sure these people are enemies. The rest of you hide in the forest. Without weapons there's nothing you can do so you'd only be in the way." "Very well," agreed the Professor. "In moments like this you are in command. Come along, Pavlo."

"Do you mind if I stay with you?" Rex asked his father.

"Why?"

"I'd like to see what happens."

"I'd rather you went with the others, but it's up to you."

"I'll stay," decided Rex.

"Okay. For a start we'll get under cover. I don't want them to see us. Let's take up positions over here."

Tiger walked briskly to the buckled framework of the *Miconda*, and having found a way inside the wreck took a seat, overlooking the village, at what had been one of the windows. Rex took the next one.

Said Tiger, as they waited for the enemy to appear: "This is a bit of a gamble. I'm hoping they'll run at the first shot. If they do, it won't be necessary to shoot anyone. If my judgement is at fault and they come for us the position will be grim because I haven't enough bullets to wipe out the whole bunch. I've five in the magazine and five spares in my pocket. But here they are!" he brought his rifle to his shoulder and jerked a bullet into the breech.

The raiders burst upon the village at a rush, yelling like maniacs and brandishing their weapons as they pranced about looking for victims. They were a fearsome-looking lot, their faces blackened and distorted with smears of chalk, or some other white material.

"No wonder the villagers ran," observed Rex. "They're enough to scare the daylights out of anyone."

One man carried a big shield on which had been daubed a skull. He had other decorations but it was not easy to see what they were. A necklace and bracelets looked like bones.

"I take that ugly brute to be the leader," said Tiger. "He'll be my first target. If I knock him down the others may pack up and go home." He still held his fire, while some of the invaders ran in and out of the houses, apparently looking for villagers who might have remained. The chief stood in the open, yelling what may have been orders, surrounded by a small bodyguard. He held his shield high in the manner of a banner, perhaps to indicate a rallying point.

"Let's see how he likes this," said Tiger, quietly.

The rifle cracked.

In less dangerous circumstances the result would have been ludicrous. The shield flew in one direction while the man who had held it was hurled several yards to finish on his back. In the silence that followed he picked himself up and looked at the sky as if he might have been under the impression he had been struck by lightning. From the way his followers stared at him it was clear to Rex that they hadn't the remotest idea of what had happened. An excited babble broke out as they argued about it.

"I aimed at the shield and hit it. I hoped that would do the trick," said Tiger. "But as nobody has been hurt I'm afraid it wasn't enough. I'll try again, and be a bit more drastic this time. I can't afford to waste bullets."

Again he took aim, and with a finger on the trigger waited until he had a clear view of the leader. Rex noticed the man had not picked up his shield. He simply stared at it as if he thought it was bewitched.

Again the rifle cracked. The chief leapt high and fell, spread-eagled, on the ground. This time he did not get up.

Again a stunned silence fell. Then another babble broke out, the warriors backing away from their fallen leader. Some stared at him; some looked around, some gazed at the sky. One, more courageous than the rest, walked up to the body and pointed, apparently at the spot where the bullet had struck.

"I think I've got them rattled," said Tiger. "One more shot should be enough." As he finished speaking he sent another bullet into the crowd, evidently firing low, for Rex saw the bullet kick up the dust.

As Tiger had predicted, that was enough. One man started to run, and that was all that was necessary to cause a stampede. Leaving the body of their leader the raiders raced away in the direction from which they had come as if, as Tiger put it, the devil was at their heels. They may have thought that. He did not fire again, and in a few seconds there was not one of them in sight.

"I don't think they'll come back but we'd better give them a few minutes to get well clear," said Tiger. Presently they went out and sat down. Tiger lit his pipe.

A short time later, when the raiders did not return, Rex walked over to the scaffolding and climbed up to the perch.

"Okay," he called. "They're well up the valley, still running." He dropped down, and looking towards the forest, waved. "All clear," he shouted. "They've gone."



See here

The Professor and Toby stepped out, to be followed by Pavlo and his crew.

"I see you've killed one of them," observed the Professor, as he came up. "Was it necessary?"

"It was," Tiger told him, shortly. "He was the leader. This was no time for half measures. The rest are still running. I fancy they'll give this village a wide berth in future. Where's everybody?"

"We didn't see them but they must be somewhere in the forest."

"Here they come now," said Rex, seeing the villagers emerging cautiously from the trees. He waved to them to show that all was well and

[&]quot;Let's see how he likes this," said Tiger quietly.

they came forward, nervously at first, but finally, when they saw the man lying on the ground, at a run.

Their reaction to their salvation was almost pathetic. For Tiger it was embarrassing, for they fell on their knees around him as if he was some sort of god. They looked at the rifle with awe. They had no idea what it was, of course, for they had never seen it in use, but they seemed to realize it was this strange instrument which had caused the death of their enemy. They pointed at it, and then at the trickle of blood on the dead man's chest.

"You've certainly established a reputation for yourself, my dear colleague," remarked the Professor, smiling at Tiger.

"As they've been so decent to us I'm glad I've been able to help them," returned Tiger. "What are they looking at?"

Rex looked up and saw a spaceship moving slowly across the blue sky. "It's the *Tavona*," he shouted. "It's Vargo." He raced to the bonfire and put a match to it. A flame crept up the side and a pillar of smoke was soon floating into the still air.

Those in the *Tavona* must have seen it at once, for the ship began to lose height. They watched it drop slowly towards them, presently to touch down a few yards away from where they stood. The door opened and Vargo stepped out.

"Why have you stayed here?" he asked.

Pavlo pointed to the wreck of his ship, which spoke for itself.

"How did it happen?" asked Vargo, looking horrified.

They told him, in the hearing of Gator and Borron who had also stepped out.

"And what has been going on here?" Vargo was looking at the dead man.

"The village was attacked by some savages of another tribe," Rex explained.

"I had to shoot one of them to repulse the attack," put in Tiger.

"You must have been glad to see the Tavona."

"You bet we were," said Rex, fervently. "The possibility of having to spend the rest of our lives here was pretty awful. That is what would have happened had you not known where we were."

"Let us go," said Vargo, impatiently. "We shall have ample time for talk in the ship."

"Dear-dear! Are you annoyed with us?" inquired the Professor.

"I am not pleased with you for delaying my voyage to Mino. We have travelled a long way looking for you. I should have met Multova before this. We may now reach Mino to find he has left for Terromagna."

"In that case, my dear fellow, all we have to do is follow him."

"To find he has left for Dacoona, of which I am anxious to have the latest news. The High Council is waiting for information."

"Very well. Then let us waste no more time. We are ready, if you are. Where will you make for?"

"First, to Mino, to see if Multova is still there."

Nothing more was said. The castaways made their farewells to their hosts, who were looking sad, as if they knew their visitors would never return. But it could not be otherwise, and in a few minutes the *Tavona* was off the ground, with the natives looking up at it and waving.

"We must come back one day and give these poor backward people some instruction in civilization," suggested Tiger.

"They might be happier without it, for then their troubles would really begin," replied the Professor, dryly. "I am happy to think we were able to save their village, and thus repay them for having entertained us so well during our enforced stay on their little world. One does not often find such nice folk."

The Tavona sped on through the eternal void.

CHAPTER VII

ROLTO TELLS A TALE

In due course the *Tavona* arrived at Mino without mishap, and there, to the relief of everyone, they found Multova still waiting for them. There also arrived on the scene, soon after the ship had landed, Morino, Rex's Minoan girl friend. Rex told her he would see her later and went with the others to Multova's temporary residence on the perimeter of the astradrome for a bath and a meal.

"What happened?" asked Multova. "I was afraid the delay meant something serious."

"It did," admitted the Professor. "But as you see, all is well."

They told him of their adventure.

Said Vargo, at the end: "To the Professor anything new is irresistible and I am afraid we shall never cure him of that weakness. For a man of intelligence he has lapses when he behaves rashly. One day he will disappear and we shall never know what happened to him."

"An accident does not always arise from lack of intelligence," replied Multova. "One of the most common causes is carelessness arising from familiarity. When one becomes accustomed to a thing one takes risks without even considering danger. But let us not talk of such matters now. You are here. I have news for you, but you look tired, so it can wait until you have refreshed yourselves."

Rex had his bath, and finding the others not yet ready went out in the hope of seeing Morino. Instead, he ran into Rolto, who was still working the shuttle service between Mino and Lentos and Mars. The Remote Survey Fleet captain greeted him with a wry smile. "So you are back again."

"As you see," returned Rex.

"Where are you bound for this time?"

"I'm not sure. It hasn't yet been decided. It may be Terromagna or we may go straight to Dacoona."

"I hear the madness of your scientists grows upon them. They make more and more explosions."

Rex had to admit this was true.

Rolto looked at him curiously. "Why do they court planetary suicide? Is it ignorance?"

"What exactly do you mean?"

"These explosions. I sometimes wonder if your people really understand the forces that keep Earth in its place, constant on its orbit."

"You refer to gravity, velocity, and distance from other planets."

"Yes."

"Of course they understand that."

"But do they realize what the slightest deviation would mean?"

Rex looked puzzled. "Why should there be any deviation?"

Rolto shook his head. "So you *don't* know. I mean these atomic explosions you now make not only in the air and on the sea but even under the surface of the ground. Are you trying to split your world in halves? Can't you realize that the force of these explosions must have a recoil of equal force? What is there to absorb the thrust of these recoils? Only one thing. The entire body of your planet. When the day comes that the recoil cannot be absorbed something must give way. Your planet would be moved in its orbit, pushed farther from the sun and from your moon. The rate of your twenty-four hour daily revolution would be changed to something more or less, according to the direction of the recoil of the explosion. It could make your world spin faster or slower. The slightest alteration could cause changes so great that everything on Earth would be different—your time, your seasons, your temperature—everything on which your existence depends."

Rex said nothing. He knew Rolto to be a man of great learning and experience, and what he said was not to be disputed.

"I have seen such things happen," went on the space captain. "Do not think I am worried about what may happen to you. But I am alarmed by what may happen to us, for inevitably we would be affected. Every planet in our Solar System is dependent, one upon the other, for its position. If one moves the others must move. I need not attempt to describe the result of any such change. It is likely that we would all disintegrate. The sun, out of balance, could sweep right through the Galaxy leaving such a trail of destruction that is beyond all imagination."

"And this is why you would destroy us."

"Yes. I wish you no harm, but our very existence is threatened. If a wild beast went mad in one of your cities what would you do?"

"Destroy it."

"Exactly. In the public interest that is the only thing to do. That is my argument."

Rex did not answer.

Rolto went on: "Earth, I believe, has only a short history of the men who dwell on it. Is that correct?"

"Comparatively speaking, yes."

"Why is that?"

Rex shrugged. "How would I know?"

"For how long do your records go back?"

"I don't know exactly, but not more than four or five thousand years."

"And nothing is known of what happened before that?"

"Very little, if anything."

"Yet Earth has existed for millions of years-of your years."

"So it is believed. What of it?"

"Has it never struck you as strange that on a world so old the only records of what men have done should be so recent?"

"I can't say it has. It just happens to be a fact."

"I could tell you why."

Rex's eyes opened wide. "You could? How could you know what happened on Earth before our written records began?"

"Have you ever seen, or heard of, a planet in the Third Region named Lila? Borron would know its position even if he has not landed there."

"Never."

Rolto smiled mysteriously. "You should ask your friend Gator to take you there some time."

"Why? For what purpose?"

"So that you could see some of the earlier inhabitants of Earth."

Rex stared. "Are you serious?"

"I never joke about such things."

"Tell me how you know this," requested Rex, still looking dubious.

"I can only tell you what I was told by some old men of Lila. They say that long long ago they came to Lila from a planet which, from its description, could only be Earth. There was then a great civilization there. I don't mean the mechanical chaos which today you call civilization but one of great knowledge and culture. A written language had been developed and men devoted their time to the study of philosophy and the natural sciences. But for a disaster of the first magnitude, the last of several, your world would be different from what it is today. As a result of these catastrophes nearly everything was destroyed and the people of Earth had to start again from the beginning. But they took a different line, and things were never the same. That, young man, is why your written records are so short."

"Do you know what happened?" Rex was trying to recall the tremendous events recorded in the earliest known writings, the Old Testament of the Bible.

"After many terrible disasters by earthquakes and visitations by meteors the final calamity was a flood which buried much of the land. About that time a ship from outer space, engaged on a voyage of exploration, had landed on Earth. It had taken on board some wise men and their wives to show them their moon and their own world from above. It was while they were away that the great disaster occurred. When they returned, except for some high mountains the land was under water and all was in such confusion that the ship feared to go down. So it went away, taking the Earth people with it. To reach home it had far to go, and as it was not provisioned for so many passengers the visitors had to be put off. They chose a small but pleasant uninhabited planet. The captain of the ship said he would return one day to take them back to Earth; but he never came, so we must conclude the ship was lost. Terrible things were happening at the time and all was darkness except for the fire of meteors. So the Earth people remained where they had been put, on the planet we now know as Lila, and there they wrote the story of their misfortunes on scrolls which have been preserved to this day. That is the story they tell."

"What sort of people are these?" asked Rex, wonderingly. "What do they look like?"

"The colour of their skins is light brown. They allow the hair on their heads and chins to grow long."

"They no longer think of returning to Earth?"

"No. They know nothing of it except what is preserved in what they regard as legends."

"What language do they speak?"

"The same language they have always spoken. They knew no other, and they live their lives much as they did at the time of the great disaster."

"What do they call their language? Has it a name?"

"They call it by the same name as they call themselves. Hebrew."

Rex stared, not without good cause. "And you have actually been to this place Lila and spoken to these people?"

"How else could I know of these things? But I must go. My ship is waiting and I have talked too long already."

"I am much obliged to you for telling me this."

"I have told you in the hope that you will take the lesson to heart, and when you go home, tell your scientists if they wish to continue their explosions they would be well advised to put a few people, with their records, on a new planet. Then, when Earth goes up in smoke and flame future generations will know what went wrong."

"Why don't you go and tell them?"

"Tell who?"

"Our scientists."



On the Planet we now know as LILA

Rolto laughed, sourly. "You are a simple boy. You should know by now that scientists live with their ambitions in a little world of their own. They care for nothing else. Once the madness comes upon them nothing will stop them."

"Already there are people on Earth who complain that these explosions have altered the weather. The scientists deny it."

"Of course."

"There have been large fall-outs of dangerous chemicals and radioactivity."

"What say the scientists to that?"

"They deny it."

"They will deny anything that interferes with the pleasure they are having. I am sure that after every explosion they say 'Now let us make a bigger one.'"

Rex nodded. "Yes, that is exactly what they do say."

"That is why one day, if I am not too late, I shall shrivel them all to cinders." With that, with an enigmatic smile, Rolto turned and walked away.

Rex watched him go and then, deep in thought, shaken by what he had heard, returned to the guest-house to find the others at their meal.

"Where have you been?" asked Tiger, sharply. "You have kept us waiting."

"I have been talking to Rolto."

"Why talk to that dangerous fellow? Never mind. Sit down and listen. Multova is about to give us his news."

"It could hardly be more important than mine."

The remark was ignored.

Rex took his place at the table.

CHAPTER VIII ASTONISHING NEWS

"You were about to tell us of your investigations into the remarkable life span of the people of Dacoona," said the Professor, looking at Multova. "Please proceed. We are most interested."

"We were going to carry out some minor operations on the peculiar gland these people possess, to which they were agreeable, when the business had to be postponed in order to deal with the disgraceful behaviour of Ardilla," replied Multova.

"I remember very well."

"Well, since I last saw you we have proceeded with the plan, but unfortunately we didn't get very far."

"What went wrong?" asked Toby. "As you can imagine, being a doctor this was of particular interest to me. Naturally, I have often wondered if you had solved the mystery, and if so, could your discovery be put to practical use on Earth?"

The Professor, smiling whimsically, looked at Toby over his spectacles.

"And what sort of reception do you think you would get, my dear doctor, if you claimed to be able to prolong life to, let us say, five hundred years. You wouldn't be able to prove your assertion."

"What would it matter if we could prolong our own lives for that length of time? But we are interrupting Multova. Let him continue."

"The first thing we did," resumed Multova, "was to collect a small party of men on Dacoona, all volunteers, and take them to Terromagna with the object of obtaining some of the fluid produced by the glands in their throats. But unhappily in this we were frustrated by circumstances, quite unexpected, beyond our control—or theirs."

"What happened?"

"They were all taken ill."

"With what disorder?"

Multova raised his hands helplessly. "We didn't know. Even now we are not sure."

"What were the symptoms?" inquired Toby.

"As soon as they were on Terromagna they developed a condition for which we were unable to account. It took the form of fainting fits. With rest they recovered, only to have a relapse as soon as they attempted any exercise. One did in fact lose consciousness, but we restored him with a stimulant."

"Did you eventually discover what was wrong?"

"We have a theory. It came when we discovered that their normal blood temperature was much below ours, and their pulse rate was only fifty."

"Which means in effect that their physical characteristics are different from ours."

"Yes."

"What did you do?"

"We couldn't operate on them in that condition so we took them back to Dacoona."

"With what result?"

"They had no more trouble. They at once became perfectly healthy."

"How very strange," interposed the Professor. "One of the first things I established when we started on our travels was that my heart and temperature remained normal when on a world of a size different from our own. It was a necessary precaution."

"The same with us, but apparently this rule does not apply to the people of Dacoona," answered Multova. "For some reason they can only live in comfort in the precise conditions in which they developed. Any change makes them ill. Why this should be is not entirely clear, but the reason may be one or all of several. The people are small in stature and their hearts are on the small side. That may have something to do with it. Again, Dacoona has a much slower rate of rotation than most planets and the average temperature of their atmosphere is high."

"What do you intend to do about this?" asked the Professor. "Drop the inquiry?"

"I don't think there is much more we can do. It really comes to this. If our theory is correct, what happens on Dacoona occurs on no other planet of which we have any information. The conditions are peculiar, for which reason the people have peculiarities. That means that even if we ascertained the reason of their longevity it would not necessarily work in the same way elsewhere."

"What exactly is your theory?" asked Tiger.
"Well, as you must know, the human body is an almost perfect piece of machinery, but like all finely adjusted mechanisms it will not tolerate any change, any interference, although it may go on for a long time without showing signs of wear. The reason for that is that it is always at work automatically replacing skin and tissue lost by wear or from the attacks of bacteria. This is so with us. We believe that the Dacoonians, although they may not realize it, have developed a self-repairing system more perfect than any other known to us. That is why they live so much longer. In order to live as long we should have to develop the system they enjoy."

"You haven't been able to put a finger on the most important factor?" queried Toby.

"No, although we are bound to take into account this unique gland they happen to possess. It could secrete a fluid which has unknown properties. It may dissolve the fatty substance which with us tends to form in the arteries, and by choking them may cause death. It may prevent coagulation in the blood stream. It may have the power of building new tissues as old ones become worn out. Any of these things could postpone the advance of old age. We could of course take some of that fluid and inject it into our own blood, but the effect, even if it worked, would only be temporary because we haven't the power to develop and maintain a continuous supply."

"Hm," murmured the Professor pensively. "The ability of a body to repair damage done to it is not unknown on Earth. We have shellfish, one of which we call a lobster, which having lost a limb can grow a new one. Lizards can lose a tail and again presently be complete. Tell me this, Multova. Why were these people taken ill on Terromagna?"

"I think the reason for that is fairly clear. They were physically unsuited to the conditions they found with us. At home they live on a small world which has of course a low degree of gravity. It has also a thin belt of atmosphere, which means that the pressure on their bodies is slight. The result of this is that the weight of their blood is less than ours, so their hearts, having less work to do than ours, are smaller. The abrupt change to conditions they had to face on Terromagna was too much for them. As you know, ours is a much larger planet with a proportionately greater gravity and a heavy atmosphere. The muscles of their hearts could not cope with the strain put on them, and unable to maintain a full circulation of blood they became faint."^[7]

^[7] It is sometimes forgotten that on Earth at ground level the weight of the atmosphere is roughly $14\frac{1}{2}$ lbs to the square inch. This may not seem

very much, but it means that the pressure on your back is nearly two tons. You are unaware of this because the weight is counterbalanced by the same pressure on your chest. The human body has adapted itself to such a condition, the internal pressure balancing the external. But any change, as for instance at a high altitude where the pressure is reduced, would be felt; hence the necessity of a pressurized cabin in a high flying aircraft, to maintain the same pressure as at ground level.

"In other words, while perfectly adapted for life on their own planet their bodies fail when taken to another," observed the Professor. "Will you carry the matter any further?"

"I don't think so. It would be unfair to ask them to risk their lives to satisfy our curiosity. They are nice people, and very lucky although they may not appreciate it. They have a long life. They live on a pleasant little world with an ideal climate. They have no wars, no worries, no aches or pains. None of the disturbing complexes that beset so many people on other worlds. Of course, all these things, even without a highly developed repair system, might contribute to a long life span."

"It could be," opined the Professor thoughtfully, "that the very fact of their having nothing to perplex them has allowed this special gland to develop to such a remarkable degree of efficiency. On Earth such a gland, even if we had it in a rudimentary form, would soon exhaust itself trying to repair the ravages imposed upon most people by the conditions of strain and anxiety in which they live and must somehow endure. Without wear and tear there is no reason why one shouldn't live for ever."

Toby nodded. "I think you're right. We live our lives too fast and really die from exhaustion. The sensible people of Dacoona have learned to live slowly, and as a result are able to keep pace with advancing years."

"Let us not make loo much of this," resumed the Professor. "After all, cases of unusual long life are not unknown on Earth. I remember reading in the works of Humboldt, the famous South American explorer, that he met at Lima, in Peru, an Indian who was a hundred and forty-three years of age. His wife, to whom he had been married for ninety years, was a hundred and seventeen years old. He observed amongst these Indians that white hair and wrinkled skins were practically unknown. He ascribed their long life to the great simplicity in which the people and their ancestors had lived for thousands of years. We also read in the Bible, in the Book of Deuteronomy if my memory serves me, that of Moses, at the age of a hundred and twenty years, 'his eye was not dim nor his natural force abated'. So you see, life

beyond the normal is possible even on Earth, if we knew the secret. You should note that, Rex, and make your motto: Live slowly, live longer."

Rex smiled wanly. "At the rate we're dashing from planet to planet we're not likely to live very long even if our lives are not cut short by accident."

"Well, so much for Dacoona," said the Professor, with an air of finality. "When you joined us, Rex, you told us that you had been talking to Rolto and that he had given you some interesting news. Was it about his plan for liquidating the population of Earth?"

"Partly. We had an argument about that in which I'm afraid he got the best of it. I'm sure he really means what he says. He bears us, personally, no ill will, but he's convinced that these hydrogen bomb explosions are a menace to the entire Solar System."

"We needn't go into that again. What else did he tell you?"

"He told me a story so amazing that I find it hard to believe. He may have been pulling my leg, but somehow I have a feeling he was sincere."

"Tell us about it," requested Tiger.

Whereupon Rex narrated the story of Earth's earlier, long lost civilization, the disaster that obliterated it, and the escape of a few people to the planet Lila, where they had survived and in course of time produced a new community. The others heard him out in silence. When he had finished the Professor looked at Vargo and said: "Do you know anything about this?"

Vargo shook his head. "This is the first I have heard of it."

"Have you ever heard of this planet Lila?"

"Oh yes. I've heard of it."

"But you've never been there?"

"No. I've never had cause to go. It is a very long way from here. As I have told you before, one cannot go out of one's way to land on every little world one sees when there are others more important. A big ship on an ocean cannot waste time visiting every little island it sees in the distance when it is going from one place to another."

"That is true. A thought that occurs to me is, if spaceships landed on Earth in the past why don't they call today?"

"How do you know they don't? Even if they don't land they look at you from time to time to see what you are doing. Have you not told me that there are people on Earth who claim to have seen what they call flying saucers?"

"That also is true," admitted the Professor. He turned to Multova. "What about you? Have you been to this planet Lila?"

"No. I have heard the name and I know where it is, but one can't go everywhere."

It was the same with Gator and Borron. They had seen the planet but had never landed on it.

"The whole thing is fantastic," declared Tiger.

"Just a moment, Group-Captain," said the Professor in a curious voice. "Let us not jump to conclusions. Vargo, does this story sound credible to you?"

"Certainly. Why not? I wouldn't be here now if you hadn't picked me up on Mars and brought me here. There is nothing remarkable about people moving from one planet to another, assuming of course they have transport for the purpose. I can't believe Rolto would tell such a tale were it not true, knowing that you would go there to investigate. If the report turned out to be false the High Council would take a serious view of it. They will not tolerate lies."

The Professor's eyes were sparkling with excitement. "This is the most fascinating story I have heard since starting on my travels. What a wonderful discovery this could be. Imagine coming across records of our own world that have been lost for ages!"

"You believe the story to be true?" asked Toby.

"We *must* believe it. It tallies with what we know. How otherwise could Rolto have heard the word Hebrew and learned the story of the Great Flood, which must have been one of the worst disasters that ever happened on Earth. No one today could question that it really happened."

"Yes, but I thought it was a local affair," said Tiger.

"Certainly not. The Tribes of Israel were not the only ones to suffer. Every nation has its legend of the Deluge, a disaster of such magnitude that it would never be forgotten. We find the same story in all ancient records. Yao, a Chinese Emperor, raised a monument to the going down of the Great Flood. In Persia there is a tribe which claims to have descended from a man named Oss, who was saved from the Flood. Noah was not the only man to escape, but the ancient writers of the Holy Writ were not to know that. It is significant that our civilization began where the people called Hebrews lived. We know from our earliest records that at the time of the Flood they were an old and learned race, men of great wisdom. From that part of our world where they lived came the fundamental sciences of the written word and mathematics. Why, the very words astronomy, arithmetic and algebra sprang from there. Oh yes, we should soon know the truth of this. The language alone should tell us. If not in its original form some words will have remained the same. Many scholars believe that all alphabets have a common origin, descending from the Semitic—that is, Hebrew."

Rex had never seen the Professor so moved.

"I take this to mean our next trip will be to Lila," said Tiger.

"Certainly, if our friends will be kind enough to take us there. This promises to be the greatest discovery of all time. Imagine it! Imagine reading the records of a civilization on Earth of which all traces have been lost and we did not even know had ever existed."

"I wouldn't be too sure about all traces having been lost," put in Tiger. "There are quite a few things in Asia Minor and Central America which no one has yet been able to explain. If there is any truth in this amazing tale we may find the answers in the records on Lila. Can you read ancient Hebrew, Professor?"

"No, but there are plenty of people on Earth who can. I know a few odd words. No doubt the people of Lila would allow us to take copies of their scrolls when we tell them we come from their original homeland. As you may know, some have recently been discovered on Earth, buried in caves."

"Why bury them?" questioned Rex.

"Because the Jews were a devout race, and had a horror of the Word of God even being seen by unbelievers. Their religious writings were never exposed to public gaze."

"When do you want to go to this place?" asked Vargo, practically.

"Just as soon as we can get there. For my part I can't get there quickly enough."

"If this place is so far off the beaten track, so to speak, how was it that Rolto happened to go there?" queried Toby, suspiciously.

Vargo replied. "That might well happen. When he was a Captain of the Remote Survey Fleet his work was chiefly exploration. He had a roving commission and would call anywhere."

The Professor sighed enviously. "What a wonderful job."

"We haven't done so badly for the length of time we've been whistling about," reminded Tiger. "I can see Rolto now, just going past. He must have been delayed."

"Stop him!" cried the Professor. "I must speak to him."

Rex ran out, and at his request Rolto followed him inside.

The Professor addressed him. "As you would expect, we are immensely interested in what you have told our young friend here about the planet Lila. May I ask you one or two questions?" "Certainly."

"You have landed there?"

"Yes. Two or three times. On one occasion I was forced down there. Later I stayed for a while to rest my crew and look over my ship."

"What are the people like?"

"In what way?"

"How far are they civilized?"

"They don't make bomb explosions if that's what you mean," answered Rolto, a sneer creeping into his voice. He went on: "There are not many of them. They live quietly in houses of wood and dried mud, in conditions which they told me have not been changed in many generations. They are deep philosophers and spend much time thinking and talking of a great King they have never seen but whom they call——" Rolto paused to search his memory "——Jehovah, or something like that. For him they have built a temple of stone."

Silence fell. Rex stared at the tall, stern-looking space captain, aware of a feeling of unreality at hearing such a word fall from his lips.

The Professor broke the silence. "How could you learn this when it seems unlikely you could speak their language, or they yours?"

"On the first occasion I landed on Lila I had to do so to avoid a broad trail of meteorites left by a comet which had crossed my course. Rather than risk damage to my ship I waited for the particles to clear. For this reason I was on the planet for some time, long enough to learn something of the language. That occasion was in the nature of an accident, but my second call was deliberate. I made a courtesy call as I happened to be in that Region."

"Do you remember any of the words you learned while you were there?" "Many."

"Then tell me this. What is their word for planet?"

"Oth."

"What do they call their chief?"

"Khazek."

"Sun?"

"Cheres."

"Food?"

"Zaid."

Said the Professor, who was pale from emotion: "Thank you, Rolto. As you are able to speak the language would you care to go with us and

introduce us to these people?"

"It is not possible. I have other work to do." Rolto bowed and went out.

The Professor, looking slightly dazed, stared at the others. "So it *is* true. It must be true. It could not be coincidence that the people of Lila speak the language we call Hebrew, although in some words it is related to Arabic. I know very little of either language, but what I have just heard is enough to convince me that Rolto's story is true in substance. How otherwise could he have known those words? After all, we must remember that for centuries on Earth Hebrew was practically a dead language, like Latin and Greek, used only by scholars and for religious ritual. Although few people have realized it we have on Earth seen the unique spectacle of a dead language come to life, in Israel, where a common language was necessary for people of many nationalities. Of all the things that have happened to us on our travels this is the most astounding. We must go to Lila."

"Were you thinking of visiting Terromagna on this trip?" asked Multova. "Nothing has been decided. Why?"

"Because if so I could take you to Lila and go on to Terromagna afterwards. I suggest that because Lila is a very long way away, and my ship is both larger and faster than the *Tavona*. It is so far distant that calls on the way would be necessary, if only for fresh water. Our good friend Vargo could come with us. As I imagine you would wish to stay on Lila longer than I could wait I could leave you there to be picked up later by the *Tavona*, which could follow us. I have enough accommodation for Vargo, but not for the others of the *Tavona*. I can leave word here where I have gone."

"If that is agreeable to everyone I think it is a very good plan," agreed the Professor.

And so it was decided.

CHAPTER IX ALWAYS SOMETHING NEW

A FEW hours later a party of men of three different worlds were walking across the astradrome towards the ship that was to take them to Lila. There was Multova from Terromagna, Vargo from Lentos, and the others from Earth; and the odd thought that struck Rex was, far from seeing anything extraordinary about this he had come to accept it as a matter of course. It also struck him that one day in the future, perhaps earlier than some people might imagine, this sort of thing would become as commonplace as presentday meetings of men of different nationalities on an international airport.

He had found time to snatch a few words with Morino, having his leg pulled by the others who wanted to know when they could expect the first marriage between Earth and Mino. Not that interplanetary marriages were any more remarkable than marriages on Earth of people of different races. Multova, for example, a Minoan of Martian ancestors, had married a girl of Terromagna where he had made his home. Rex told Morino where he was going and said he hoped to be able to spend more time with her on his return.

There were several ships on the astradrome, some coming in and some leaving on various duties, but none was more impressive in size and design than the one from Terromagna. Shaped like a deep saucer it gleamed in what looked like a coat of grey enamel with its name and nationality in bright red ciphers. The name of the ship, Multova told Rex who could not read it, translated meant *Grey Lady*. He said it was their latest design and he did not know of a more efficient ship. Modifications and improvements were constantly being made, as with all types of vehicles on Earth.

"On Earth you are still working on the wrong lines," said Multova, casually. "You'll never get anywhere while you rely on liquid fuel for your motive power. Just as your internal combustion engine made ordinary flying possible so one day will the discovery of how to employ cosmic and other rays, which exist in unlimited quantities everywhere, revolutionize your ideas of space travel. You might shoot a rocket to your moon but of what use is that? By telling your scientist-engineers what you know you could advance them a thousand years of laborious experiments of trial and error."

"Our people are not yet ready for anything so startling," put in the Professor, who had overheard Multova's last remark. "Heaven only knows what they would do with such power if they had it. First they must change their outlook on life. All they think of at present is war, and all energy is directed to that end."

Tiger looked at Rex and winked. They all knew what the Professor thought of war.

They stepped into the ship and took their places. Multova made a signal to the commander. The heavy self-sealing double doors closed automatically. Then came the familiar whine of the cosmic jets. Switches were thrown. Instruments glowed, and in a few moments the astradrome appeared to be falling away as if the ship had dropped it.

The journey that followed was the longest Rex had ever undertaken, and although he had prepared himself for it the time seemed interminable. He lost count of the hours, having forgotten to wind his watch, for this was the only means he had of reckoning the passage of time in terms that he could grasp.

Conversation had naturally been devoted almost entirely to the amazing story Rolto had told them, and the Professor was able to enlarge on it.

"There is no doubt," he said, "that Earth had suffered some tremendous disasters long before the Flood. Of what they were only fragments of evidence remain in writing, and these are more in the nature of legend than established fact. There is, for example, the story of the lost continent of Atlantis which sank into the Atlantic ocean about eleven thousand years ago. Plato, the Greek philosopher, claimed he had an ancestor named Solon who knew all about this, having had the story from some Egyptian priests. Those records were lost in the fire that destroyed the Alexandrian Library, in which were stored a hundred thousand ancient manuscripts."

"Is it known when the Deluge occurred?" asked Toby.

"It is held by some to have occurred about 2348 B.C. Many people think it was confined to what we call Iraq, but I don't share that view."

"Why not?"

"Because we find the same story all over the world. It is not peculiar to the Hebrew account told in the Bible. People do not forget a disaster of such magnitude, and even if the story is not preserved in writing it survives in legend told by parents to their children. The same story of the Flood is told by the Indians, Chinese, Persians, Babylonians, Syrians, South and Central Americans and even the Polynesians of the Pacific. The damage and loss of life must have been appalling. Of course, Noah and his party were not the only people to escape, as the old Hebrew chroniclers believed. They were not to know that. They could not be expected to know, if Rolto's story is true, that some of their people escaped to another world. I recall that the story of the Flood was written on the sacred tablets of Babylon. They were translated into Greek. I'm convinced that the Flood must have covered much of the Earth. Of course, the ancient Hebrew writings present many mysteries that have never been solved."

"Such as?" questioned Rex.

"The Lost Tribes, for example. There were originally twelve tribes of Israel, founded by the twelve sons of Jacob. In 721 *B.C.* ten of the tribes, having been defeated in battle were carried off into slavery by the Assyrians under Sargon. What became of them is not known, for which reason they have since been known as the Lost Tribes. The two tribes that survived and remained in their homeland were Judah and Benjamin. There is a school of thought which believes the Lost Tribes escaped and made their way to Northern and Western Europe, even to England. Certainly there were plenty of Jews in England long before William the Conqueror came over and dispossessed them of their land."

"So the people on Lila might have been members of any of the Tribes."

"Yes. The Flood had occurred long before the ten tribes were lost, but they would of course know all about it. It is a tremendous thought that the people now on Lila might have records, which on Earth were lost in the Flood, of some of the frightful things that went on and make such a tale of woe in the Old Testament. It is all very thrilling. Of course, the people of Lila would know nothing of the history of the Jews since their own departure from our planet. They would know nothing of the Great Redeemer who arose from the surviving tribe of Judah, or of his crucifixion, which was the common form of execution in those days. If what Rolto says is true, we may come upon some really prehistoric information."

It was at this juncture that Multova interrupted to say they were approaching a small intermediate planet named Lut where he intended to call for fresh water. This would give them time to relax, sweeten the ship, and refresh themselves with a bath if they so wished.

"I take it this place Lut presents no dangers?" said the Professor.

"None at all," Multova assured him. "It is a very pleasant little place, ideal for what I have heard you call a picnic. Being within the influence of two suns it is rather warm, but rain falls frequently and cools an atmosphere that is as comfortable as one could wish. Both pressure and gravity are slight, but you are accustomed to that."

"Are there any human inhabitants?"

"No. The only inhabitants are insects and small reptiles, all of which, as far as I know, are harmless."

"If the place is as pleasant as you say why are there no people on it?"

"I don't know. We can only assume that life, when it occurred, followed a different course. That often happens, as you must be aware. By what conditions human forms come into existence we still don't know, but it seems to be largely a matter of accident. There is plenty of vegetation. I imagine Lila must have been such a world as this, for which reason these Hebrew refugees from Earth decided to stay there. Apparently they liked it and have remained there, or their descendants have, ever since."

"People have done that sort of thing on Earth, although their movements have of course been confined to their own planet. Our present troubles arise largely from the fact that we have few pieces of land left unoccupied, with the result that people try to seize land that is occupied by someone else. That means war."

"It seems a pity, with so many excellent planets unoccupied," said Multova. "The sooner you have spacecraft the better. If people were unhappy with their land they could then go somewhere else. That would end your wars."

"I doubt it. They would then squabble over the most desirable planets."

Multova sighed. "Well, from the millions of planets available there should be enough for everyone. But we approach Lut, a case in point. No one could wish for anything better. When you have spaceships you can recommend it to people who are dissatisfied with what they have on Earth."

"I will keep it in mind," returned the Professor, a trifle cynically.

They were now all looking at the planet towards which the ship was dropping. From a distance it seemed to Rex to be all that Multova had claimed for it; and this was confirmed when they touched down, and he, with the others, stepped out. With flowers, trees and flowering shrubs on all sides he might have been in a tropical park. The warm still air was filled with the hum and buzz of insects. A brook of clear water from the high ground meandered past. Had it not been for the rather torrid heat Rex would have said the place was as near to paradise as it was possible to imagine. He noticed one curious phenomenon. As a result of there being two suns, one high and the other low in the sky, shining from opposite directions, there were no definite shadows, and what there were seemed to be duplicated and so thin as to be hardly noticeable.

A cheerful meal on the grass beside the ship was brought to an end by a sudden rather heavy shower of rain, which forced them to retire inside. But

it did not last long, and the suns were soon shining again. The brook, which had been little more than a trickle, as a result of the rain falling on the high ground now filled its bed. Rex took off his shoes and paddled. Finding the water comfortably warm he declared his intention of taking a bathe, so throwing a towel over his arm he strolled back to the brook and set off along the bank, making for the point where it was lost to sight round a wooded bend.

"You're sure there's nothing here to be afraid of?" he called back to Multova.

"Nothing at all," was the answer. "It's quite safe but don't go too far because we shall be moving off fairly soon."

Rex strolled on, leaving the crew disposing of garbage that had accumulated in the ship during the long voyage.

He went a fair way before he found a spot ideally suited to his purpose. This was a deep pool with a little beach of sparkling grey-white sand below a grassy bank. Observing that the water was already going down again he threw off his clothes, had a plunge, swam around for a little while and then sat on the bank, with his feet resting on the moist sand, to dry off in the sun. Thoroughly enjoying his sunbathe he sat there for some time, watching the clear water flowing past and trying to work out the cause of a curious metallic glint he sometimes saw in it when the sun caught it at a particular angle. He noticed the same sheen in the sand into which he had allowed his feet to sink. The sun had already dried the surface. The water had also left a slight deposit on his body where it had dried, rather in the manner of salt sea water but with a slight shine. He rubbed some of it off and found it was a fine, white metallic dust.

After a while, deciding he had stayed long enough and afraid he might be keeping the others waiting, he resolved to rejoin them. Rising, in trying to take the first step towards his clothes, he nearly fell on his face when he found his feet stuck in the sand.

At first he was not particularly alarmed. He pulled. Nothing happened. He pulled harder. Still nothing happened. In something like a panic he pulled and jerked and twisted, but for all the progress he made his feet might have been clamped in a vice. He tore at the sand with his fingers, only to discover with a shock that the surface of the sand was as hard as rock, so hard that even with his nails he could make no impression on it.

Panting, he sat down again, staring unbelievingly at his feet, trying to work out what had happened. The sand, which had been as soft as ordinary sand when he had first stepped on it, seemed, in drying, to have turned to cement. He reached for a stone intending to use it as a hammer, only to find that it had set in the stuff. A few more efforts to get clear made it obvious that he would never get free by himself; indeed, he could not see how the others would be able to help him.

Deciding that he would have to let them know what had happened he let out a hail. But apparently he had gone farther than he had realized, and he had to do a lot of shouting before, to his relief, he received an answer.

Presently Tiger appeared round the corner. "What the deuce are you doing?" he demanded, angrily. "You were told not to be long. We've been waiting for you."

"I'm sorry, but I'm stuck," explained Rex.

"You're what?"

"Stuck. I can't move an inch."

"Don't be absurd."

"Well, you try to move me," invited Rex, grimly.

Tiger strode up. He seized one of Rex's legs and pulled. He pulled several times before he released it. "How did this happen?" he asked.

"Don't ask me. I only sat here to dry after having a dip and this was the result. This sand must be some sort of cement."

"Why must you always get into trouble?"

"Oh dash that, Guv'nor. You can't blame me. Multova said I had absolutely nothing to be afraid of."

"He can't have known anything about this." Tiger hunted on the bank and returned with a heavy stone. With this he began trying to chip away the substance by which Rex's feet were held. But it was soon evident that he was not going to get far by this method.

The Professor arrived on the scene. "What are you two doing?" he inquired, curtly. "Multova is getting impatient."

"Rex has got himself well and truly stuck," informed Tiger.

The position was explained.

The Professor brushed back his hair. "Dear-dear. What will happen next?" He examined the sand.

"Instead of fiddling about with that you'd better go back and tell Multova what has happened," said Tiger, shortly. "He may be able to suggest something. A heavy storm of rain might cause the water to rise high enough to drown Rex where he sits, in front of our eyes, with us unable to do anything about it." This was a possibility that had not occurred to Rex, and he was glad to see the Professor hurry off for help.

He was still sitting there, helpless, when the Professor returned, not only with Multova but with the entire ship's company, all carrying receptacles of one sort or another.

To Rex's annoyance Multova was smiling. "There's nothing funny about this," he expostulated.

"Don't worry," returned Multova, casually. "We'll soon have you out. I've seen this stuff before but I was not aware that it occurred here or I would have warned you. It is a form of metal we call Klantz. It sets hard when it is dry but softens in water. When you arrived here it must have been wet."

"It was," confirmed Rex.

"When the rain stopped the water receded and what you took to be sand dried and set hard in the sun."

By this time all hands were busy with the receptacles throwing water over Rex's legs and the hard ground around his ankles. In a minute or two he could feel the stuff becoming soft and was able to wriggle his toes. Then, with a squelch, he was able to pull his feet clear, whereupon he lost no time in retiring to the grassy bank where, having washed his ankles and toes in a pan of water he got dressed.

"What extraordinary stuff," remarked Tiger.

"It is a metal," said Multova, simply.

"It has a peculiar property."

"Many metals have a peculiar property," reminded the Professor. "Had you never seen mercury, a liquid metal, you would find it hard to believe that such a metal existed."

"Klantz is not uncommon," resumed Multova. "It can be very useful. I know a planet where most of the buildings are constructed of it. While wet it is pressed into large thin sheets, trimmed square and assembled to form the walls of a house. Another peculiarity it has which you may not yet have noticed is that its weight is so slight that one man can carry on his head enough plates to build a house."

"What happens when it rains?" asked the Professor. "From what we have seen here one would expect such a house to collapse when water fell on it."

"A means has been found to prevent that. The building is done only in the dry season, when the stuff sets as hard as iron. The longer it remains like that the longer it takes for water to affect it. Actually, there is no risk of that, because when hard the plates are given a protective coating of gum, derived from a tree, which also hardens in the sun and is impervious to moisture. Household utensils are also made of it. The metal here was so recently wet that it decomposed quickly under the influence of water."

"It seems to be a sort of ready-made plastic," observed Tiger.

The Professor shook his head. "Well—well. Wonders will never cease," he remarked, tritely.

"Now Rex has his clothes on let us move off, please. We have lost much time already," concluded Multova.

CHAPTER X WHAT HAPPENED ON LILA

THE long journey to Lila was resumed.

Only one more landing was made on the way but as nothing of interest happened there it can be passed over. Rex, travel-weary and suffering from the mental strain of knowing he was such an astronomical distance from home that he could hardly believe he would ever see it again, relaxed with a deep breath of relief when Multova announced they were nearing their destination. Pulling himself together he looked at the lonely world they were approaching. From a distance it appeared much as any other world, but the proximity of the sun that controlled its orbit warned him to be prepared for a hot climate. He was not surprised, therefore, when a closer view more or less confirmed this, for a great part of Lila appeared to be desert. He could see sunlight shining on clouds and water, but there was nothing the size of an ocean as the word is understood on Earth.

As the ship went on down he made out a small town of white houses with narrow streets adjacent to what was clearly an oasis, with groves of trees that might have been date palms. With a queer feeling creeping over him he realized he might have been looking down on a typical scene in old Arabia, or a Biblical scene as depicted in illustrated editions of the Bible. The sensation was enhanced by a number of structures, pyramid in shape, scattered about nearby. From the shadows they cast they were obviously of some size.

Apparently Tiger noticed these for he exclaimed: "Don't tell me I can see pyramids!"

"That wouldn't surprise me," said the Professor.

"That would mean these people came from Egypt."

"Not necessarily."

"I was under the impression that pyramids were peculiar to Egypt."

"Then you have been misinformed. Pyramids are among the oldest structural forms on Earth and they are not confined to the deserts of the Middle East. There are just as many in Mexico and other countries of Central America. It will be interesting to see here if the old traditions persist. They may give us a clue to the origin of our friends below."

"What sort of traditions?"

"Those we have on Earth. One in particular. Pyramids, which with us go back to a remote age, were built primarily as tombs, but having a religious significance they embodied certain features. The four sides face the cardinal points of the compass. There was an entrance on the eastern side to permit the body of the dead person to be carried in. There was also an opening on the western side to allow the spirit of the departed one to escape." The Professor looked at Rex and chuckled. "You may have heard the expression 'he's gone west', for a nice way of saying someone has died."

"Of course."

"But did you know the origin came from the pyramids? The spirit of the dead person went west—towards the setting sun."

"I didn't know that," admitted Rex, thinking what a strange place he was in to learn such a thing.

"I see people moving about," continued the Professor, excitedly. "According to Rolto they are peaceful, so there should be no risk in landing near that little town. I'm afraid we shall be up against the usual language difficulty. What a pity Rolto couldn't come with us to act as interpreter. However, it's no use talking of that now. We shall have to manage as best we can."

The ship went on down and landed. People at once began walking towards it, but without the usual haste of those who had never seen such a ship before. Neither did they show any fear. In fact, their casual behaviour supported Rolto's story that he had more than once been there.

Rex was disappointed. He had expected to see indications of a high civilization, instead of which he found himself gazing on a scene almost primitive in its simplicity. The men wore long, white, loose robes and walked with a calm, stately carriage. They might have been high-caste Arabs, whose features are not unlike those of their Hebrew neighbours. But that, reflected Rex, might be said of most peoples occupying the lands at the eastern end of the Mediterranean.

"Let's go out and meet them," said the Professor. "We shall soon know how much truth there is in Rolto's story. Judging from appearances there seems to be little doubt about it."

The doors were thrown open and they stepped out.

At the very last moment a suspicion darted into Rex's mind that these people were not as passive as he had been led to believe. It may have been a cold, calculating look in their eyes; it may have been that they carried daggers on their hips and some had their hands on them; or it may have been the way they circled round behind as if to cut off retreat to the ship. But by then it was too late to do anything. Before Rex could so much as voice his suspicions there were sudden cries and violent hands were laid on them. Taken by surprise there was not even a struggle. Tiger did protest, but a dagger point at his throat caused him to desist. As the language was not known protests were futile.

Only Vargo spoke, furiously and bitterly. "This is Rolto's doing. It was all a trick to get us here. He lied. He must have known what these people were like."

No one answered. Rex, for one, was inclined to agree, as, in the centre of a hostile group, they were taken to a small building and thrust inside. The door was closed. The heat was suffocating. There was only one small window, unglazed. Through it Rex could see two sentries standing outside.

"I'm afraid we're in trouble again," said the Professor, wearily, sitting on the earthen floor with his back to the wall. "I don't understand this. Why should they treat us this way? The Hebrews are hospitable people. They must have a reason."

"You think they really are Hebrews?" Toby asked the question.

"They certainly look like it."

"What do you suppose they intend to do with us?" asked Rex, anxiously.

"That, no doubt, is something we shall learn in due course. I hope it is nothing very unpleasant."

Rex looked alarmed. "What do you mean?"

"The ancient Jews were a fierce and warlike people, as most tribes had to be at that time if they were not to become slaves. The usual custom was to put prisoners of war to death, and they had some dreadful ways of doing it. One way, as you must know, was to kill the victim by stoning him to death. They stood the prisoner in a hole in the ground and then hurled rocks on him until he was dead."

"That's a nice thought, I must say," muttered Toby.

"You really think they might do that?" asked Vargo, calmly.

"According to Rolto these people have retained their old Hebrew customs. The stoning of criminals and prisoners of war was one of them."

"It seems to me that the sooner we make contact with them, to find out what this is about, the better," declared Tiger. "There must be an explanation."

"Yes, but how can we make contact?" cried the Professor despairingly. "We can't speak their language." Rex had an idea. "If as we have been told, they still keep to their old religion, we do know at least one word of it, perhaps the most important."

"What word?"

"Jehovah. The name of their god."

"That might suggest we ourselves are Jews, or know something about them," agreed Tiger. "Let's see if the word has any effect on them."

Rex walked to the window, and looking out saw that a person of importance had arrived. He was a tall, haughty, commanding figure dressed as if for a ceremonial occasion. He wore a turban on his head and carried a staff. But what really caught Rex's eye was an ornament that hung on his breast. It was a large gold cross.

It was with some excitement that he conveyed this information to the others. "These people must be Christians," he declared.

The Professor shook his head sadly. "The cross means nothing. If you look at the statue, at the British Museum, of King Samsi Vul, who ruled in Assyria in the ninth century before Christ, you'll notice he wears a cross on his breast. No, Rex, the cross was a symbol long before Christianity. Crosses were worn by the ancient Egyptian gods Horus, Osiris and Ammon. You'll find crosses on the oldest monuments in India, and ancient Celtic coins found in Western Europe. The cross did not become the Christian emblem until the fourth century A.D. If these people came here at the time of the Deluge they can know nothing of Christianity."

"Let's be practical," said Tiger. "What is this high priest, or whatever he is, doing?"

"Talking to the sentries. He's important enough to have a bodyguard."

"Try them with the word Jehovah. You should soon know if it means anything to them."

Rex returned to the window. The high official was still there. When Rex was able to catch his eye he said loudly: "Jehovah! Jehovah!"

The man started. He stared. They all stared. They looked at each other with astonishment written plainly on their faces.

Rex glanced over his shoulder. "They know it," he whispered. "The big man is coming in."

The official and his bodyguard entered. He said something in a loud clear voice, but what it was nobody knew.

After a moment's silence the man raised his staff and cried: "Jehovah!" "Jehovah," they all echoed.

"I have an idea," said Vargo. "If Rolto was here long enough to learn the language there should be someone here able to speak at least a few words of Minoan." Looking at the high priest, or whatever the man was, he said: "Mino," and at the same time pointed a finger in the direction of the sky.

The man smiled curiously—rather grimly, Rex thought. He said something in a low voice to one of his companions who hurried off.

Everyone waited. Only one word was spoken, and that was when Rex, thinking the name might be recognized, said, "Rolto?"

His answer was a furious glare. He retired, abashed.

"I have an idea Rolto got into some mischief here," said Vargo, shrewdly.

The man who had gone off returned, bringing another. He asked in Minoan where they had come from, and had obviously been sent for to act as an interpreter. It turned out that he did not speak Minoan very well, but a little was better than none, and with some difficulty a conversation was carried on, helped, as usual, with hand signs.

To record the words in detail would be tedious, but what slowly emerged was something like this: and one of the first facts to be revealed was the reason why Rolto had declined to accompany the expedition. The story he had told of his visits was true, but he had not told all.

It appeared that on his arrival at Lila he and his crew had been well received and given generous hospitality. He was a man of great curiosity, asking many questions, and on learning of the ancient sacred writings which were kept in the temple asked to be allowed to see them. This request had been declined, the reason being that as the name of God appeared on the scrolls they were never exposed to the eyes of strangers. This was the only request that had been refused, but such was the custom. Apparently Rolto was not satisfied with this, for after his departure he had returned secretly, and then had the wickedness to break into the holy temple to search for the scrolls. He was caught in the act, and for this sacrilege would have been put to death had he not made his escape, killing a priest in so doing.

When Multova's ship was seen to land it was thought the infamous Rolto had had the temerity to return, so it was resolved to seize everyone on board and put them all to death. As Rolto was not there others would have to pay the penalty. The Professor then gave his version of the story. He admitted that he knew Rolto; he had seen him on Mino and had there learned the story of Lila. They themselves were from the planet Earth, which was the home of the people known as Hebrews. It was natural therefore that they should wish to visit Lila and see the ancestors of this ancient race of men. Following the Flood (about which the listeners obviously knew) there had been great events and many wars, said the Professor, as a result of which the Hebrews had been scattered far and wide; but they were now back in their original homeland reclaiming and irrigating much soil for cultivation.

The Professor went on to say he was sorry for what the impious Rolto had done, but could not be held responsible. They knew nothing about that. Should they be allowed to leave they would return to Mino and report the matter to the High Council, who would no doubt see that the culprit was suitably punished.

This had the desired effect. The visitors were taken to a large hall where refreshments were set before them and the conversation resumed. To an intensely interested audience the Professor told of how Noah had escaped from the Flood, and some of the events that had occurred afterwards. The full story was told in the Bible, and the Professor promised, if they were allowed to go in peace, they would try to return one day with a copy of that Book in the Hebrew language.

The high priest said he would be happy to relate the legends of their early existence on Earth.

It was perhaps unfortunate that before this could be done there was a sudden buzz of excitement, the reason for which turned out to be the arrival of the *Tavona*, which landed by the *Grey Lady*. The Professor lost no time in explaining that these were friends and Rolto would not be among them.

When the two crews met this was confirmed; but there was a man on board unknown to Rex. He wore the uniform of a Terromagnian special messenger. He had in fact brought an urgent message, as Multova, who knew him, quickly learned. It was simply this. Multova was to return home instantly, for his ship was required to help in the prevention of a calamity.

Multova, naturally, wanted the details, but was told impatiently that there would be ample time for that when they were on their way to Terromagna.

The position being explained to the high priest, who appeared to be the ruler of the community, he raised no objection to their departure, so after a friendly leave-taking in which the Professor promised to return if this should prove possible, the two spaceships took off together and were soon *en route* for home. The Earth party and Vargo went, as they had arrived, in the *Grey Lady*, bound for Terromagna, and with them went the special messenger who was introduced to them as Nargil. The ship that had taken him to Mino, he explained, being urgently needed, had returned home when it was learned what Multova was doing and that the *Tavona* was about to follow. That was why he had travelled in the Minoan ship.

Gator and the Tavona headed for Mino.

"All I can say is," Tiger told Rex quietly, "it was a lucky thing for us Rolto didn't accept the invitation to come with us to Lila. Had he been on board we would by now have discovered if the people there still clung to their old methods of putting their enemies to death."

"Rolto knew what he was doing when he refused to come with us," declared Rex, in a hard voice. "I'll never trust that scoundrel again."

Multova interrupted this line of conversation by saying that Nargil was ready to tell him why the return of the ship to Terromagna was a matter of extreme urgency.

CHAPTER XI NARGIL SPEAKS

LOOKING at Multova, Nargil the messenger made his report.

"This is what has happened," he began, "and when I have delivered my message you will understand the reason for your urgent recall home, although it is your ship that is needed rather than you personally. A short while ago there came to Terromagna a visitor from a planet which those who live on it call Romunda. It is on the edge of the Fourth Region, in the Galaxy of Orthox, the brightest light in the constellation of the Five Trees."

"I think I know it by sight," answered Multova, to whom, as an experienced space traveller, the stars in the heavens were an open book. "We call it by another name."

"You have never been there?"

"No."

"Few people, if any, from our Region have—or had until recently—on account of its remote position. Since you went away we have had a visitor from there and news has been exchanged. We now call the planet by the name given to it by its inhabitants, which, as I have said, is Romunda."

"What sort of world is this?"

"Very advanced in some respects; in others, backward."

"How did they know about us?"

"For some time they have been picking up our routine radio signals and, though it took some time, they were clever enough to translate them into ciphers they understood. In that way they had come to know something about us."

"What signals are these?" asked the Professor.

Multova explained. "For a long time now we have been transmitting a continuous message to outer space for the benefit of anyone who had receivers sensitive enough to pick the signals up. At any time now you should be receiving them on Earth. Indeed, you may already have done so, without interpreting them, or even realizing what they were."

"That could be so," agreed the Professor. "Our latest radio telescopes have picked up a lot of strange sounds from outer space. I have heard them myself. What was the purpose of these signals?" "There was no particular purpose. The idea was to allow other planets, with adequate receiving apparatus, to know of our existence."

"We on Earth are about to do the same thing, if in fact we have not already done so," informed the Professor. "Language is, of course, the big problem. Sounds are one thing, but to understand them is another. Even human voices are not always recognizable as such. Their pitch and tone can vary considerably."

"A high degree of scientific and technical knowledge would be necessary to receive such messages, and still more to interpret them correctly."

"Quite so," agreed the Professor.

Nargil resumed. "It seems that Romunda had been picking up our signals for some time, and having worked out the direction from which they were coming were not long in locating us. A visit to us was actually being planned when something occurred to hasten it, and resulted in a mission being dispatched forthwith."

"What happened?"

"Disaster threatened. Peril of the first magnitude. I will endeavour to explain the position. Briefly, there is almost certainly going to be a collision which might have far-reaching effects."

"Collision between whom? Terromagna and somebody?"

"No. We ourselves, as far as we have been able to estimate, would not be involved. Within easy spaceship distance of Romunda there is a rather small planet named Parvo. Romunda and Parvo have long been on visiting terms, the good reason being, as sometimes happens, that one is able to produce what the other cannot. The people of Parvo are great cultivators and grow fruits, vegetables and herbs of medicinal and nutritive value that will not thrive on Romunda. On the other hand Parvo cannot work metals, which means they do not make spaceships or any other mechanical devices, for which reason they are glad to exchange their vegetable products for the obsolescent ships for which Romunda has no further use."

"Very sensible co-operation," put in the Professor. "Do I understand that Parvo is backward in scientific matters?"

"Apparently their civilization has developed on different lines. They are extremely clever in all forms of art. What is perhaps more important they are good people, happy, contented and entirely peaceful in their habits and outlook. Fortunately they have a very thin population, not more than a few thousand souls altogether."

"Why should that be fortunate?"

"Having been afflicted by one major disaster which killed many people, those that are left are now faced with total obliteration."

"Good gracious! How terrible!"

"You must understand that having only recently made direct contact with Romunda we don't know a great deal about either of these worlds, conversations being devoted almost entirely to the impending calamity. It seems that Parvo has a satellite, a moon of fair size. For some unaccountable reason this has got out of orbit and is now drawing slowly and steadily towards them. Already it appears twice its normal size and its phases have become erratic. This, we may suppose, results from loss of orbital velocity, which would inevitably affect its lunar cycle."

"The poor people must be terrified."

"On the contrary, knowing what must happen they have resigned themselves to it."

"But how could such a thing happen?" interposed Rex. "I was under the impression that all natural forces of the universe remain constant."

"So they are as long as there is no interference with them," answered Multova. "That is Rolto's argument against Earth. By the tremendous explosions you now make, and the missiles you too carelessly fire into space, you are endangering the stability of yourselves and your moon. That becomes a threat to us; in fact, to everyone in our system. What your scientists do not appear to have grasped, unless they are deliberately closing their eyes to the risks they are taking, is this: the balance resolved by gravity is so finely adjusted that the slightest change can have dire effects."

"Is that what the people of Parvo have been doing?"

"No."

"Then how could this happen to them?"

"From natural causes beyond control."

"Such as?"

"A barrage of meteors over a long period could change the weight of a satellite. Gasses escaping into space from suns or exploding stars could create a resistance that might slow the velocity of a satellite coming in contact with them. Loss of centrifugal force would put such a satellite at the mercy of the body having the greatest gravitational pull. In most cases this would of course be the parent body, as Earth is the parent of its moon. The chances of such a thing happening are remote but the fact that it may occur only once in a million years does not rule out the possibility. It can happen to any world at any time. Earth is a comparatively small planet. If it were to

fire heavy substances into space long enough it would reduce its mass, and so lose, in however small a degree, some of its gravitation hold on its moon. That is an exaggerated example, but it may illustrate what I mean."

"In the matter of Parvo the reverse seems to be the case," resumed Nargil. "Some other body has released its hold on its satellite moon with the result that it is now falling towards its parent."

"But won't the moon become incandescent and burn itself out when it enters Parvo's atmosphere?" queried Tiger.

"An ordinary meteor would do that, of course, but a body the size of a moon would not have time to disintegrate before it came into collision with its parent. Even if it did start to burn the heat would destroy all life within its range of influence."

"So it's good-bye to Parvo."

"So it would seem."

"Can nothing save it?"

"Only another celestial accident that might put Parvo's moon back on its correct orbit. The chances of that happening are so small that they need not be considered."

"How long has this change of orbit been going on?" inquired Vargo.

"The movement was observed some time ago," replied Nargil. "At first it was thought to be a trick of light, due to some change in the density of the atmosphere, which might produce an optical illusion. When the unfortunate people of Parvo realized what was really happening they told some visiting Romundians who had already noticed the sinister irregularity of the satellite. All they could do was warn the wretched people of Parvo that their world was about to come to an end."

"How frightful!" exclaimed the Professor. "Imagine being menaced by such an appalling disaster. I wonder how the people of Earth would react if such a thing ever happened to them."

"It could happen," returned Vargo, calmly. "It would not be the first time we have seen a world disappear in a flash of flame and smoke. In fact, those who watch the skies must know it happens constantly. Is this likely to affect Romunda, Nargil?"

"We think not. We are too far away."

Rex broke in, sadly. "The people of Parvo have absolutely no hope of salvation?"

"None whatever. That is, they have no hope of saving their world. There is one way by which some of the people might save their lives."

"And what is that?"

"By means of transportation to another world, another planet. There are plenty available. That has been suggested to them, although it seems unlikely that the entire population could be saved in this manner."

"What had they to say about the proposal?" asked the Professor, looking at Nargil over his glasses.

"They realized that if some were to live there was no alternative. At first they all said they would prefer to stay and die with their homes. It was pointed out to them that while this might be a natural and noble resolution it was really rather foolish and quite unnecessary. The question then arose, who should stay and who should go. It is to the credit of every man and woman on the planet—and this will give you an idea of their character—that they all volunteered to stay so that someone else might escape the inferno. After some discussion and persuasion it was agreed that the first to go should be the children. These would be followed by the women. Then, if there was still time, as many men as possible would be taken off. The very old men, who had enjoyed a good span of life, would be the last to leave."

"Bravo!" cried the Professor. "That is as it should be with civilized people. When is this fantastic project of removal to begin?"

"It has already begun. Romunda has put every available ship to the task. To that number Parvo has put those of its ships that were spaceworthy. Now," went on Nargil, looking at Multova, "you will understand why I was sent to fetch you. Your ship is needed. Every ship engaged means a few more lives can be saved. There should still be time for us to make several journeys."

"To where are the refugees being taken?"

"To a small uninhabited planet which has now been named Lonparvo, or, as you would say, New Parvo. Neither we nor Romunda could accommodate a new population so we had to find somewhere quickly, not too far away yet beyond the effects of the collision when it occurs."

"This seems rather like those people on Earth being taken to Lila," put in Toby.

"Yes, although that was in the nature of an accident while this is a deliberate undertaking," agreed the Professor.

"One day," said Vargo, "if your scientists go on as they are now it may be necessary to rescue some of the population of Earth."

"That's a sobering thought," murmured Toby.

"I call this a wonderful enterprise," asserted the Professor. "It is obviously better that some of these unlucky people should be saved, if it's humanly possible, than they should all perish. But first we go to Terromagna."

"Yes," confirmed Multova.

The Professor looked dubious. "Shall I be in the way during this big operation?"

"I don't think so. I suppose you would like to be a witness of such an unusual event."

"I would certainly like to know how far it is successful."

"Then let us say no more about it."

"Had we had time to inform the High Council of Mino of this they might have put some of their ships into the rescue work."

"We may find it necessary to call on them. We could always send a signal on the long distance radio waves."

The conversation lapsed as the ship sped on its way and everyone settled down to his own thoughts.

CHAPTER XII ROMUNDA

REX, who had been asleep, was awakened by the slight change of velocity as the cosmic jets came into reverse thrust to produce a gradual reduction of momentum prior to entering the air belt of Terromagna. Looking through his observation porthole he saw to his surprise that they were already close, and it was not long before the wonderful panorama of the capital city could be seen in the perfect visibility of a completely smokeless atmosphere.

Once again he saw the flower-lined walks and gardens, the white buildings and the smooth flow of the traffic which he knew was noiseless. There, too, was the magnificent astradrome, the finest he had ever seen anywhere. There were only a few ships standing on it, from which he supposed that the main fleet was away on its mission of rescue. There was one, however, that attracted his attention by reason of its large size and unorthodox design. Instead of the usual flattish body which promoted the name of "flying saucer" it was deeper, dome-shaped, more in the manner of a colossal pudding basin. It was obviously a stranger, but where it had come from he had as yet no means of knowing.

The odd thought struck him that one day there would be similar astradromes on Earth. That needed no great stretch of the imagination when he recalled the great airports at home, when less than fifty years ago there was not even such a thing as an aerodrome. Earth still had some way to go to reach the Space Age, but it was catching up fast with some of the old planets where space travel was no more a novelty than a railway train on Earth.

The *Grey Lady* having landed, Multova made some inquiries after which he informed the party that the leader of the Romunda delegation, a man named Dominov, was at the guest-house. The big ship, at which they were gazing with admiration, was his. They would go and make themselves known to him.

One of the smooth, sleek, silent vehicles, in which Rex had previously travelled, took them to the imposing building which provided accommodation for the crews of visiting ships. There, in the main assembly hall, furnished for comfort but with maximum simplicity, they found some members of the Terromagnian government engaged in earnest conversation with men of a type Rex had never before seen. His first impression of them was admiration, for they were both tall and handsome to a degree that was almost startling. He guessed they were the visitors from Romunda.

They were all clean shaven, and unlike the Terromagnians wore their hair short. Well built, with shapely limbs, they moved with a peculiar dignity. Their skins were bronzed to a pale golden-brown. Their foreheads were rather prominent, which had the effect of making their eyes appear deep set. Their clothes were colourful and comprised a long, loose fitting jacket, of some material like velvet, over trousers that hung in folds over the knees. The dominant colour was green, with decorative collars and cuffs of pale blue or white. One wore a gold sash across his chest.

They were gathered round a map which lay on a table and this evidently provided the subject under discussion. It broke off when the new arrivals walked in. Introductions were made. The man wearing the gold sash turned out to be Dominov of Romunda, and he and his compatriots regarded the Earth party with a curiosity that was pardonable, since although, as it transpired, they knew of Earth, none had ever been there.

The discussion was resumed, and as it was conducted in a language, or languages, which Rex did not understand, he could only stand and watch. He heard Multova tell Vargo that some details of the relief expedition were being reorganized.

"Has something gone wrong?" asked the Professor, anxiously.

"Not exactly. But there was concern about some of our crews finding their way to the planets involved, Romunda, Parvo and New Parvo. They are a great distance from here, in a region which some of our men have never visited."

"What will you do about that?"

"The risk does not arise."

"How is that?"

"Because the Romunda ships are able to keep them together so that it would be impossible for them to stray. As I believe I told you, the Romunda ships are far in advance even of ours. They are equipped with a magnetic flux generated by forces within the cosmosphere. As long as the captain of the leading ship knows where he is he can, by switching on this power, attract other ships to him. Far from a following ship getting off its course it would be impossible for it to go in any direction except the one imposed on it. The question arose because the device has a limited range; but it has now been worked out that it will cover the greatest distance likely to be involved in the rescue operations. But I must go back. I will tell you about the final arrangements when they have been settled." Multova rejoined the conference.

When he came back, some time later, it was to say that decisions had been reached and a start would be made for the scene of operations the next morning. In the meantime they would rest, have a meal, and prepare themselves for the journey.

Dawn the following day found them on the astradrome, where many ships had now assembled. The Romundian supercraft was still there, and Multova informed them that at Dominov's invitation they would travel with him, the other ships following at close intervals. The crew of the big ship, which included, Rex noticed, some of the gentlemen he had seen at the conference table, was already standing by, so as there was no reason for delay Multova led the way to the entrance doors. Dominov beckoned them in and indicated the seats they were to take.

For a little while Rex could only stare at the spacious luxury of the interior, compared with which the Professor's *Spacemaster*, in which he had made his first flight, was as a dinghy to a transatlantic liner. The controls and vast instrument panels were things to marvel at, yet the furnishings, while not over-elaborate, provided every possible comfort. The massive doors closed without a sound, and had Rex not been looking out of a window and seen the ground dropping away below he would not have known they were off. There was no noise, no fuss, no vibration. The duty watch stood at their posts like statues, eyes on the flashing, multi-coloured instrument dials in front of them. There was no sensation of discomfort, no pressure on the body, no singing in the ears. In fact, the great ship might have been a balloon suspended stationary in space.

So this, thought Rex, wonderingly, was what space travel *could* become. What would the scientists and engineers on Earth think of it if by some magic they could see all this? Some of the words the Professor had said during their early days came back to him. "We shall see wonders beyond all imagination." Well, that was what they were seeing now.

Multova, who had been talking to Dominov, came over and explained the procedure it had been decided to adopt. It was really quite simple, and, as far as Rex was concerned, much as he expected. After calling at Romunda they would join the fleet of ships operating a shuttle service between Parvo and New Parvo each with a maximum capacity load of passengers. How long this could go on would depend of course on the distance of the peril and the estimated speed of its approach. That was still an unknown factor, but there would obviously come a time when all the ships would have to be called off or risk incineration. It appeared that while most of the ships were working direct between Parvo and New Parvo, others, less efficient, were plying between Parvo and Romunda. One of the reasons for this was the disposal of the refugees, for the finding of food and housing for an entire population was itself a problem —as Rex could well imagine.

After a time, the novelty of the voyage in such a ship beginning to wear off, he went to sleep, as the most relaxing way of passing the time. This passing of time on a long voyage was also a problem, one that he thought would never be solved until he had learned how to sink into the physical condition of something like the winter hibernation of a dormouse, which most of his interplanetary travelling companions had mastered. Once he opened his eyes and saw that a relief watch had taken over. Those off duty had dropped off into their usual state of coma. There was nothing worth looking at out of the window. The stars and constellations were strange, otherwise he might have been looking at them from anywhere on Earth.

More time passed. To Rex, dozing on and off, it seemed interminable. How long it actually went on he did not know. Nor did he care particularly. All he knew was that travelling at the speed of light, or faster, could be boring in the extreme, and he hoped they would soon arrive at their destination, or one of the other planets involved in the operation. He didn't mind which, as long as he could get out, breathe pure air, feel solid ground under his feet and see blue sky above him.

At long last he must have gone off into a deep sleep, from which he was awakened by a buzz of conversation. Glancing out of the window at his elbow, expecting to see nothing more than the usual myriad points of light, he was jerked into a state of complete wakefulness by the sight of what he realized at once must be an enormous planet, for although the ship was still some distance away from it, only a section was visible from where he sat. He saw the others were all looking at it and heard Dominov say: "Romunda."

Soon afterwards came the familiar pressure that was the result of reduced speed; this meant they could not be far from the big planet's atmosphere, so he knew their long journey was nearly over. With a pleasant sense of expectancy, for here there would be no danger, he watched the details of the world they were approaching take shape, the vast expanses of land separating themselves from what he knew from experience were oceans.

Turning to speak to Tiger he saw something which for a moment aroused his curiosity, although in the speed of events he was unable to ask for an explanation and the matter passed from his mind for the time being. Dominov was taking from a pocket an instrument that looked rather like a small camera. On top was what appeared to be a mouthpiece; at the side, secured by a spring, was an earphone. Dominov spoke a few words, listened for a moment and then replaced the instrument in his pocket. Before Rex could ask him what he was doing he had turned away to speak to the man at the controls. Rather than interrupt, Rex resumed his contemplation of the panorama that was fast taking shape below. He could see several large towns, interconnected by white lines, as straight as if drawn by a ruler, which he took to be roads. He perceived they were falling towards the largest, and this he assumed, correctly as it transpired, to be the capital.

The general picture presented was one of a magnificent civilization, rather like Terromagna, with imposing buildings lining broad, flowerbordered streets. It struck him that this passion for natural colour, which flowers provided, was universal, for it had been evident at every civilization he had seen. It was in fact an essential part of civilization, or so it seemed. It was the same at home, where nearly every house had its bed of flowers; where there were not gardens people made miniature artificial ones inside or outside their windows. They took flowers into the house. Only savages and backward peoples had no interest in, or could find no time for, floral decoration.

The thought passed when the astradrome which was evidently their objective appeared to float up to meet them. It was the largest Rex had ever seen and was obviously intended to accommodate a large fleet of spacecraft. Machines were coming and going, and there was a general impression of activity.

Within a few minutes they had themselves landed, and with the others Rex stepped out into warm, fresh air, under a cloudless sky.

"We will go to the reception hall, where you may rest and have some food while I make enquiries," said Dominov, leading the way down a flowered walk to a large white building, with an imposing façade, standing in beautiful grounds. On reaching the entrance the crew went off to their own quarters while Dominov took his guests to a comfortably furnished lounge. As they seated themselves he said: "Please excuse me while I speak to the Controller, who will probably be at the landing ground where the refugees from Parvo are being received." So saying he took from his pocket the instrument Rex had seen him use just prior to their landing. He had a short conversation with some unknown person and replaced the instrument in his pocket.

"What is that?" asked the Professor, curiously.

Dominov seemed slightly surprised by the question. "Only a communicator," he answered. "Don't you have them on Earth?"

"Not like that."

"It saves much time."

"How does it work? What exactly is its purpose?"

"It enables those who have need for such a device to speak to each other. You have just seen me speak to the Senior Controller who is working some distance from here."

"Do you mean with that instrument you can speak to *anyone*?" asked the Professor.



See <u>here</u>

... the panorama was fast taking shape

"Certainly, within limits. By which I mean with anyone who carries the instrument. It would be difficult here to manage without one. Before we landed I spoke to the control officer here and he told me where I was to put the ship. Do you mean you have no such instrument at home?"

"We have an instrument called a telephone but it needs connecting wires. One can only speak to people who are connected by the wires."

Dominov nodded. "I believe we had such a primitive arrangement here but it was a long while ago, long before my time." "Don't forget we have Walky-Talky wireless," Rex reminded the Professor.

"Yes, but that is not available to the general public." Turning back to Dominov the Professor went on: "If several people happen to be using the device at the same time, as must sometimes happen, how do you keep the conversations separate?"

For a moment Dominov looked puzzled. "You must be very backward in the field of cosmic radio research. It provides an unlimited number of wavelengths."

"But how do you generate enough power, with a tiny instrument like that, to speak over a long distance? You haven't even an aerial."

"You mean a thing of metal that stands up in the air?"

"Yes."

"But that is not necessary once you understand the power that is available, everywhere, in unlimited quantity."

"Would you be a little more explicit?" requested Tiger. "As an engineer by profession I find this extremely interesting."

"I understand from Multova that you have succeeded in splitting the atom."

"That is true."

"But apparently you have not yet learned how to make full use of it. You are obviously unaware of its tremendous power or you would not be doing on Earth the things that Multova tells me you are doing. I haven't time now to go into the technical details, but, briefly, the instrument works by everyone having his own wavelength."

"But thousands of wavelengths would be necessary!"

"Why not? The selectivity of cosmic radio is such that wavelengths varying in microscopic distance can be separated easily. When I wish to speak to someone——"

Dominov broke off as from the instrument beside him came a thin but penetrating noise. He made an adjustment and raised the earphone. The call signal faded. He listened for a moment and replaced the receiver. "That was another of our ships just coming in," he explained. "The Captain is a friend of mine and called me to find out if I had returned from Terromagna. He, like me, has been recalled from an expedition to help in the work of evacuating the population of Parvo."

"Hadn't we better be getting on with that instead of sitting here talking?" suggested Tiger, bluntly.
"We can't start on a voyage of that description until my ship has been refitted," Dominov told him. "It won't take very long. I shall be told when everything is ready. While we are waiting we might go to the observatory and see how things are going with Parvo and its troublesome moon. On the way I can show you something else that may be of interest to you. We should have time. It will take only a few minutes."

"And what is that?" inquired the Professor.

"The headquarters of the Metal Transmutation Research Establishment."

"Now you mention it I have noticed that you appear to use only one metal here," said Tiger.

"Come," requested Dominov. "I will show you. The establishment is on the way to the observatory so we shall not be wasting time."

He rose, and the others followed him to one of the several vehicles that were on duty outside.

CHAPTER XIII

DOMINOV GIVES A DEMONSTRATION

THE long low car glided soundlessly down the broad white perimeter road between banks of flowers, soon to stop at the doors of an exceptionally massive-looking building of stone construction. Dominov led the way in, through a hall into a long, rather narrow room, lined on one side with a series of mechanical installations. Transformers, erected on stone bases, stood at intervals, each one surrounded by a protective wire screen. To Rex the picture gave an impression of an exhibition of electronic devices. On the opposite side there were benches and shelves on which stood an array of bottles and jars of different colours and sizes. Several men, wearing overalls of a stiff material, were at work. One wore a mask.

"This is the transmutation testing laboratory," announced Dominov.

"Then you can actually transmute metals?" queried the Professor.

"Of course. It saves much trouble and labour."

"What is the object of this? Are you short of some metals?"

"Not exactly short, but one is more easily mined than the rest, for which reason we use nothing else."

"Does that mean you use only one metal—for every purpose?"

"I have not made myself clear," said Dominov. "Let me explain. We mine only one metal, the one that occurs in the greatest quantity. This we transmute into any other metal that may be required. I must add, however, that using the common metal as a base, we have developed an all-purpose alloy. You might call it an artificial metal since it does not occur in nature. It is used for household appliances, industrial machinery, transport and constructional work. Such a metal saves time and labour."

"What sort of metal is this?" asked Tiger. "As an engineer I am intrigued because I can see at once that the possibilities are enormous."

"I will show you a piece of the original." Dominov went over to a small stack of ingots and returned with one in his hand. He offered it to Tiger who, after looking at it closely, handed it back with the observation that he thought it was the metal which on Earth was called iron.

"Unfortunately, in this state its use is limited, because it is subject to oxidation by water."

"Then it probably is what we call iron, which has the same disadvantage," answered Tiger.

"Yet because it is so easily mined, and is found in large quantities, the use of it was necessary," went on Dominov. "Having produced it in its natural form we send it to the transmutation plant where it is converted into all the metals required for various purposes."

"Are you telling us that you can turn this into any known basic metal?" inquired the Professor, incredulously.

"Certainly."

"But I was under the impression that iron was an element!"

"I don't know exactly what you mean by an element, but physically all things are possible."

"But you can't turn an element into something else."

"Why not?"

"Because it can't be done."

Dominov smiled sadly. "I understand what Multova means when he says Earth is a backward world that still has much to learn. You know that matter of all kinds is an arrangement of atoms whirling round a central nucleus."

"Yes."

"Good. Now if you take two gasses, let us say hydrogen and oxygen, and chemically combine them an explosion takes place in which two atoms of hydrogen will assemble with one atom of oxygen. You then have another form of matter."

"Water."

"Exactly. But you can't have an atom of water. The least you can have is a molecule, which in this case is a combination of three atoms."

"Yes, I know that."

"Very well. If you fuse one atom of an element with another atom of the same thing a different form results, because you now have a heavier atom. In fact, you have altered the nature of the activity within the nucleus. Have you not discovered this on Earth?"

"Unfortunately, yes," put in the Professor, sorrowfully. "It has resulted in a horror which is called a hydrogen bomb. Had we put the discovery to a useful and practical purpose, as apparently you have, we would have achieved something. I suppose the truth is, we are still in the experimental stage of transmutation. So far we have been unable to find a simple way of doing it. We can only do it by setting up enormous and elaborate atomic piles." "That must be because you are behind in the field of cosmic reaction," remarked Dominov, casually. "It is quite unnecessary to resort to such great power to effect the change. All you need is a cosmic condenser. Let me give you a demonstration."

With the party keeping beside him Dominov walked over to one of the machines, and raising a heavy metal lid put in the piece of iron. He then threw a switch at the side. At once there came a high-pitched humming noise while brilliant blue concentric flashes played along a tube in the heart of the machine. Suddenly there was a loud explosion which sent everyone except the operator staggering back.

"I am sorry," said Dominov. "I should have warned you, but I am so accustomed to this that I forgot to mention there would be a certain amount of noise. However, it is all over now." He cut the switch and moved a lever. With a dull clang a piece of metal fell into a receptacle at the bottom of the machine.

Everyone stared. Its colour was yellow, and it shone with the lustre of gold.

"It will soon be cold, then you can examine it," said Dominov, without emotion.

After a short wait he picked up the transformed metal and handed it to the Professor. "What do you call that?" he inquired.

The Professor examined it, testing its weight. "We call it gold," he said, in a curious voice.

"Well, that's all there is to it," continued Dominov, easily. "Each of these machines is set to produce a different metal. The large one at the end will produce one which has all the qualities of what you call iron except that it cannot be oxidized by the action of water. That is our general-purpose metal. As you would not have noticed any difference merely by looking at it I chose this machine for the purpose of demonstration."

"You were quite right when you said we on Earth have much to learn," agreed the Professor.

"You understand, of course, that this establishment is only the testing and experimental department," explained Dominov. "If we had time I would show you the factory where metals are turned out in quantity ready for use. We may do that later. Now let us move on to the Central Observatory for I am anxious to see what the position is on Parvo."

They returned to the car, and after a short drive pulled up before a splendid domed building. Rex followed the others inside to find himself in a really tremendous building that reminded him somewhat of the interior of a cathedral, but without seats or any form of decoration. The walls were white, smooth, had a glazed surface and were divided into panels. Having seen the same sort of thing on a visit to Terromagna he knew that the walls were actually large television screens. There was only one man there. Dressed in white he sat at a formidable-looking switchboard. Dominov went over and spoke to him. Returning, he indicated the panel they were to watch.

Rex waited, slightly tense with excitement, for this, having seen television at home, was something he understood. On Terromagna it had impressed him more than anything else, probably by reason of the degree to which television could be developed. That this would happen in due course on Earth he had no doubt, but for the moment its scope took his breath away. Interplanetary television in colour was more like a dream than reality.

Watching, he saw the first pearly opalescence appear, to be followed by a nebulous image. Then, as the operator brought this into focus, there came the picture, clear, in colour.

Two large round objects, one larger than the other, almost filled the screen. So clear were they that details of their markings could be picked out, and he guessed they were looking at Parvo and its satellite moon. He heard Dominov catch his breath. Coming from the usually imperturbable space captain it sounded to Rex like a gasp of alarm, or horror.

"What is it?" asked the Professor, quickly. "Bad news?"

Dominov pointed at the screen. "The moon must be falling fast on Parvo. It is twice as big as when I last saw it. I'm afraid we are going to be too late. I would say the moon is already smoking."

"I can't see any smoke," said Rex, trying to be optimistic.

"You wouldn't, any more than you would see the clouds in the atmosphere of Parvo. Neither clouds nor smoke could affect the penetrative powers of this instrument, which works on the principle of light transformed into electro-magnetic waves and afterwards rectified."

"Which of the two bodies is the moon?" asked Rex.

"The smaller one. It appears still to be in orbit, but the orbit is becoming elliptical, therefore every time it circumnavigates its parent body, Parvo, it will go closer to it. At any moment it may start to fall."

"Then there is no hope for Parvo."

"None. The planet has the satellite in its grip, which it can never now release. The angle of fall is bound to become daily more acute. But why do we stand here talking? We may still be in time to save a few of the people. Let us go." Turning abruptly Dominov strode out of the building and hurried towards the car. "Phew! Imagine seeing a moon falling on your head!" breathed Tiger to Rex, as they sped back to the astradrome.

"And not being able to do anything about it," returned Rex, in a melancholy voice.

"It's a pretty sobering thought that such things can happen," put in Toby, who had overheard the remark.

"It became obvious to me some time ago that in the Universe anything can happen; and when I say *anything* I mean that," asserted the Professor. "Such frightful collisions as the one now threatening Parvo are happening all the time. If only our people at home would reflect on that, and realize that our turn may come, they might behave differently."

"I question that," said Toby. "Even now there's no security any more for anyone. As far as our teenagers are concerned, what with rockets, missiles and artificial satellites whizzing about haphazard, to them the future must look grim enough already. Why make things worse by telling them the world they're standing on might one day start rockin' 'n' rollin'?"

"I suppose you could be right," sighed the Professor. "Of course, it may never happen."

"That, no doubt, is what the people of Parvo thought."

"A nice, cheerful, conversation, I must say," muttered Rex.

Nothing more was said.

CHAPTER XIV THE HORROR

THEY reached the landing area at the same time as there arrived a convoy of Romunda ships bringing in loads of refugees from the stricken planet. Those who had already disembarked were standing in queues waiting for transport to take them to the temporary accommodation that had been prepared for the emergency. Some were standing, looking about them curiously, others sitting on boxes and bundles presumably containing the few personal treasures it had been possible to bring with them. One child had a small bird in a cage, apparently a pet. There were people of all ages but they were mostly women and children. A few were talking, but most of them appeared to be stunned by what had happened to them, and for the first time Rex was able to appreciate fully the tragedy of such an event.

There had, he knew, throughout the ages been mass migrations on Earth, sometimes from areas menaced by flood or volcanic upheavals; there had also been occasions when people had fled before the advance of a conquering horde; but to his knowledge there had never been anything on such a scale as this. Anyhow, it was one thing to move from one part of a world to another. Then there would always be the hope of returning. But to have to leave one's world, and everything one knew, for ever, that was a different matter.

Rex was aware that the people he could see were only a tiny part of the whole, most of them having been taken direct to their new planet. Knowing as he did what must sometimes have happened in space he had often tried to imagine what might happen when a world suddenly found its existence threatened by forces beyond its control. Now he could actually see it happening, and for stark tragedy it surpassed anything he had visualized. Dressed in simple, practically identical clothes, the people looked very ordinary folk, as he would have supposed of a world not very highly civilized; but they were human beings, and none the worse for that. He thought of the last good-byes that had been said, and were still being said, on the doomed planet.

It was a heartening thought, and rather wonderful, how in such dire emergency other worlds had rallied their resources to help. That was true civilization. That was the difference between men and animals which, in time of peril, are concerned only with their own survival. He had a feeling that should a major disaster happen on Earth the people would stand by each other in just the same way, animosity forgotten. In fact, from what his father had told him, something of the sort had happened in the great war, when bombs were falling. That was the test, the only test possible, he reflected, for war was something that could not be rehearsed. It seemed queer that it should need mortal peril to bring out the best in human beings.

Some of the ships, having unloaded their passengers, were already taking off again, and Dominov, who had walked away to speak to one of the captains, returned with the latest information from the scene of the catastrophe.

"The end is close, but there may be a little time left," he reported. "I am happy to be able to tell you that most of the people have been taken off. All the women and children have gone except those who have decided to meet death with their families. Chiefly it is a few old men who remain."

"The place must be in a fearful state of panic," surmised Rex.

"On the contrary everyone is calm, as is usually the case with civilized people in the face of overwhelming calamity. Those who remain stand in lines quietly awaiting their turn. There is no fighting for places in the rescuing ships, no argument as to who should go next. My friend tells me it is a truly remarkable spectacle of self-control when one sees what is over their heads. Let us go. We may still be in time to save a few of these poor souls."

"What has happened to the ships that came from Mino?" inquired the Professor.

"They are already there, hard at work."

"I thought they were to wait for us."

"In order that time should not be lost they were taken in magnetic tow by another of our ships. It comes to the same thing. Gator has gone on with the *Tavona*. We may see him at Parvo."

With an unusual sense of urgency they took their places in the ship, and in another minute were on their way to the scene of the impending disaster.

During the journey that followed Rex spent most of the time staring out of the window watching for the first glimpse of the objective. He didn't actually expect to see Parvo and its moon; what he was afraid of was that he might see the blinding flash of light that would fill the sky at the moment of collision, signifying that the end had come. He knew that such explosions had sometimes been seen by astronomers on Earth, through their telescopes. Now, he pondered, he was about to see this terrifying sight with his naked eyes.^[8] ^[8] These exploding stars are called by astronomers Novæ. An insignificant little star may burst out into a brilliancy many times greater than the sun before it fades. It is not a common occurrence, but nearly 100 have been observed during the past 60 years. What causes this is not known, but it is thought to be either the result of a celestial collision or spontaneous combustion within the planet. A typical example was one that occurred in the constellation of Perseus in 1901. It increased in brightness 80,000 times. Spectroscopic examination revealed tongues of flame leaping at 1,000 miles a second. Such an explosion, compared with which a hydrogen bomb is a mere squib, may take some time to subside.

Time passed. Inside the superb Romundian ship all was silent, the cosmic jets having been cut off when maximum velocity had been reached, for thereafter, without the skin-friction of an atmosphere, this would be maintained indefinitely without power. Faces were grave, which was not surprising in view of the mission on which the ship was engaged. Nothing had yet been said about the risks the crew was taking in going anywhere in the region of the explosion. Rex knew there must be risks, terrible risks. The collision would inevitably produce fantastic heat and showers of meteors; possibly long-tailed comets that would leave a trail of fire and white-hot matter far into space. Nothing near the centre of the conflagration could survive. Damage might be caused on distant worlds. Large meteors were not unknown on Earth.

In spite of his state of mind he must have dozed, or sunk into a deep reverie, for it was with a start of surprise that he heard Vargo say: "I see them."

Rubbing his eyes and looking out he saw directly in their line of flight what appeared to be a double star, such as Earth with its attendant moon seen from a distance. He observed that one was a good deal larger than the other, and that they seemed almost to be touching. The smaller one was somewhat brighter than its companion and had a sinister red tinge in its colour. He wondered if it was already within the atmosphere of the planet it was about to destroy. Now wide awake he thought the red glow could only be caused by heat. He had seen that awful burning planet Jupiter, in his own Solar System, look just like that. It was a sight he would never forget, for the tremendous gravity had nearly dragged them into it.

At any moment now he was prepared to hear the jet brakes come into action to retard their velocity; but still the expected high-pitched whine did not come and the ship raced on towards a scene that soon would be a raging inferno beyond human imagination. Slowly the two stars increased in size, and his lips went dry at the thought of what would happen should the distance be misjudged and they failed to stop or turn aside before reaching the area soon to become a mass of flame.

He heard Dominov's radio receiver buzz; saw him take it out and adjust it; listen; say something in his own language and return it to his pocket.

"That was Nicol, a friend of mine who commands one of our ships," he announced.

"What did he say?" asked the Professor, tersely.

"He called to inform me that his ship, the last to land on Parvo, has just left. Everyone is being warned to get well clear because the end cannot long be delayed."

"Is the evacuation complete?"

"Not quite. But as far as it is possible."

"Then there are still some people there."

"A few."

"Who are they?"

"A few old men who volunteered to remain so that younger people could be saved."

"Do I understand it is intended to abandon them?"

"Yes."

"Why?"

"Because no one can now go near without great risk."

"Do the people of Romunda shrink from risks?"

Both Dominov and Vargo looked askance. "Don't you understand what may happen at any moment now?" asked Dominov.

"Of course I do."

"Already we are in the danger zone. Should the impact occur we would become a cinder in an instant of time."

"I still say we should try to pick up these last few people. They must be brave fellows," declared the Professor, doggedly.

"It will not be a nice way to die."

"I can think of no better way of dying than in trying to save others. If it happens we shall know nothing about it."

"Is that your usual behaviour on Earth?"

"It is. But this is not my ship. It is yours, so it is for you to decide. For my part I would go on, and I'm sure I can speak for my friends."

"Look out of the window."

Rex, who had turned to look at the speakers, switched his eyes to the porthole. What he saw seemed to cause an icy hand to clutch his heart. While the conversation had been going on they had drawn near so that everything was now in plain view. The spectacle was so awful that the strength went out of his limbs. He could only stare.

The planet Parvo was still bright and clear, apparently normal, but its terrible moon was a dreadful sight. Without any orbital motion it was already curving down at an oblique angle towards its parent. Its colour was dull red in patches. Behind it trailed a line of smoke that must have been many thousands of miles long. Caught by the rays of a distant sun the smoke glowed with a lurid orange light.

"It's smoking already," cried Tiger, in a strangled voice. "It must be on the fringe of the atmosphere."

"It will soon take fire," said Dominov, calmly. "Do you still wish to go on?"

"Yes," answered the Professor, through his teeth. "How deep is the atmosphere of Parvo?"

"I don't know."

"Have you reason to think it is deep?"

"Yes."

"Then it may be some time before the collision occurs. It will be slowed down by friction. There is even a chance that when the satellite sinks into dense air there will be a cushioning effect, causing it to bounce. That may happen several times. Scientists on Earth are relying on that method to bring their first spaceships back to Earth."

"When the satellite sinks into the atmosphere it will tear it to shreds. The wind created will be beyond belief."

The Professor took off his glasses, breathed on them and began to polish the lenses. "I have no more to say. The matter is entirely in your hands. For myself I do not care, but I will not ask anyone to throw away his life."

Nothing more was said. The ship still held on its way, the planet and its moon growing larger every minute with Rex staring fascinated at a sight which he was sure no one had ever seen before. Curiously, perhaps, he was no longer afraid. The thing was too tremendous for that. He might have been already dead, a spirit watching, without emotion, from another world. He saw that the ship was being directed to a point, farthest for the time being, from the approaching monster. On this side it was still daylight, although the surface was a little vague, as if seen through a screen, a faint haze, or perhaps dust. The smoke trail behind the satellite was thicker, with long tongues of flame beginning to lick along it. Rex wondered vaguely if there had been any form of life on this particular moon. Certainly there could be nothing on it now. Where were the old men who were supposed to be on the planet? He thought it unlikely the ship would be able to spot them. He tried to estimate the gap between the planet and its treacherous moon, but found it impossible. The ship, leaving the vertical position, began to swerve towards the horizontal, presumably to survey fresh ground. Towns and villages appeared.

"I can see them," suddenly burst out Tiger.

"You mean the men?" asked Dominov.

"Yes. There they are! Look!" he indicated the position.

Following it with his eyes Rex picked them up almost at once, a little group of perhaps twenty people huddled together on their hands and knees on a piece of open ground near a town of some size.

"Down! Down to them!" cried the Professor, in a voice that sounded almost exultant.



See <u>here</u>

The spectacle was so awful that the strength went out of his limbs. He could only stare

Tiger caught Rex's eye, and smiling sadly shook his head, although just what this was intended to convey was not clear.

The jet brakes began to whine their high-pitched note, but still the ship plunged on, now heading towards the little group that comprised the last human beings on Parvo.

"They've seen us," said Vargo. "They're looking up. They wave!"

To Rex the next few minutes were not true. Dazed by a sense of unreality he was aware of the ship going down. He felt its legs crunch into the ground in an unusually heavy landing. Clouds of sand and other objects flying before a wind of unbelievable violence began to strike the ship. The doors opened. A shrieking whirlwind of hot air poured in.

"Quick! Get them in," cried Dominov.

The Parvoans did not have to be told what to do. They knew what was intended. But to act was another matter. Already the wind was tearing the clothes from their bodies and when they tried to rise they were thrown down. Even the ship began to drag under the pressure of the wind. But crawling, rolling and scrambling, the men came on. There were, Rex noticed, two boys of about his own age among them. Hanging on to the ship he reached out and catching by the arm one of them who looked like being blown past the door, dragged him in. The noise was deafening. It sounded like what it really was, the last gasps of an expiring world. Speech was impossible.

How the rest of the men managed to get inside the ship Rex never knew, for he was thrown to the floor and was unable to rise. Vaguely he was aware of them being dragged inside, to fall and lie still, sometimes on one another, hands over eyes and ears. The ship was packed. As in a ghastly nightmare he saw the doors close, which did at least shut out some of the appalling uproar. He could feel the ship dragging faster and faster. He managed to get into a kneeling position and with his hands on the metal floor could feel it was getting hot. His one thought was "I can't bear it. I can't bear any more," but presently he had to when his body was crushed by a pressure he had not known since his first take-off in the Professor's old cosmobile. He felt his senses were going.

Tiger must have managed to get to him, for he heard him shout in his ear: "We're away."

CHAPTER XV HOMEWARD BOUND

REX had enough sense left to realize that Tiger meant they were off the ground, on their way out; but that did not mean they were out of danger. Far from it. They would have a long way to go before they would be beyond the influence of the awful thing that was about to happen. He was thankful that it hadn't happened yet. The heat in the overcrowded ship was stifling. It was taking all the moisture out of his body and he was conscious of a devouring thirst. He felt that time had somehow become telescoped and this frightful business had been going on for ages.

The killing pressure began to relax and he breathed more freely. That could only mean they were well clear of the planet's atmosphere and had reached escape velocity. He knew of course why everyone had been subject to such a terrible strain. In a matter of life or death, Dominov, at the moment that speed was everything, had accelerated to the limit of endurance in a few seconds, instead of, as was usual, taking it slowly. Raising his head he saw people lying all over the floor, and the thought struck him, with so many people consuming air, how long would their supply hold?

He saw Dominov wilting at the controls. Apparently even they had become hot in the murderous heat for his hands were wrapped in rags. One of the crewmen, his face a hideous orange from what was happening outside, poured a little water on them.

Rex managed to drag himself to his window, and, flopping into his seat, looked out. He saw that both the planet and its satellite were on fire. The orange flames were reflected inside the ship, which must itself, seen from outside, have looked like an orange floating in space. The two bodies were not yet actually touching, but they were very close, with the moon just above its parent. Parvo appeared about the size of a football, and its moon perhaps no larger than a tennis ball, which obviously meant that the ship was now far away from them. But still not out of danger. Breathless, Rex watched, mentally counting the minutes, each one of which increased their chances of escape.

Inside the ship some of the Parvoans were now sitting up; others still lay flat. Toby was on his knees among them doing what he could with restoratives from his medicine cabinet. Rex turned back to the window just in time to see the end, and the picture was photographed on his brain for ever. Suddenly the moon seemed to collapse, and the result was as if a cauldron of white-hot metal had been overturned on the world below it. There was no sound, the ship was too far off for that. All that could now be seen was a pure white light that seemed to fill the Universe. While it still persisted an invisible hand was thrust against the ship, causing it to spin sickeningly. It was, Rex guessed, the blast of the explosion. Quite slowly the glare began to subside, shrinking towards its centre.

"I think we've done it," said Tiger at Rex's elbow.

"I'm beginning to feel a bit sick," returned Rex, in a hollow voice.

Tiger pointed out of the window. "Look!"

Rex saw what he meant. Where Parvo and its moon had been was now an area of whirling sparks, some of them flying off at a tangent. As a shooting star will sometimes appear to move slowly, an illusion caused by distance, so with the sparks.

"Meteors," said Vargo, who had joined them. "Don't touch the side of the ship."

"Why not?" asked Rex.

"It's rather hot. But that won't last long."

"Do you think we're safe now?"

"Yes. The only risk now is of a meteor overtaking us, but the chance of that is small."

"There are a lot of meteors, some of them look big ones."

"They have a lot of space to fill."

"Thank goodness for that."

As a matter of detail a meteor, a very large one, did overtake them, but luckily not exactly on their line of flight. From his window Rex watched the fireball go past them. He wondered vaguely where it would end up. What a strange thing it would be, he pondered, if it ended its career on Earth. But that was something he would never know.

Toby joined them. "That was a pretty close squeak," he announced, cheerfully. "We were only just in time."

"How are the people we picked up?"

"They're all right. Or they soon will be. Some of them are suffering from shock."

"That doesn't surprise me," said Tiger, grimly.

"I'm feeling a bit that way myself," asserted Rex. "I don't think men were ever intended to see such things."

"If that were so we wouldn't have seen them," Toby pointed out.

"And what good has it done us to see them?" asked Rex, bitterly. "I shall never feel the same again. I feel sort of—old."

"You're lucky, my lad, to be feeling anything," rejoined Toby.

"Do you know where Dominov is making for—Romunda, or this planet New Parvo?"

"He says Romunda."

"With all these people breathing shall we have enough air to last out?"

"Dominov thinks we should just do it. If there's any risk of our running short he's going to park these people on one of the safe planets he knows."

"And leave them there for good?"

"Oh no. Only while he goes on to Romunda to top up his tanks."

"It will be interesting to see some more of their wonders on Romunda," said the Professor, coming over.

"Not for me," answered Rex. "I've had enough wonders. All I want to do now is go home and forget this ever happened."

"Tut-tut, my boy. You can't really mean that," chided the Professor. "It will be a long while before any boys on Earth see what you have seen."

"They're lucky," replied Rex, in a melancholy voice.

He meant it, for at that moment he had a great longing to see again the world he knew. Never had home seemed such a desirable place. Earth might be a humble world compared with some he had seen, but it had much to recommend it; the green fields and woods, the quiet rivers, the sleepy hamlets, the songs of the birds... In space he had gained much knowledge, but it seemed suddenly to him that knowledge was not everything. There were other things just as important, if not more so.

Weak from reaction he swallowed a few sustaining tablets from the ship's emergency store and after that slept most of the way home.

They managed to reach Romunda after all, without making an interim landing, and there, on the astradrome, they found assembled a great fleet of ships, most of which had been engaged in the evacuation operation. Gator was there with the *Tavona*, and Rex was delighted to see again his old shipmates, safe and sound.

After a meal and a short rest at the guest-house the question arose what to do next. The Professor was anxious to stay a little while longer on Romunda and perhaps call at Terromagna with Multova on the way home. But Rex had been serious when he said he had had enough. He was for going straight home without any delays. A short argument ended in a compromise, and the fact that Vargo wanted to go home, and that Gator and Borron were leaving almost at once, may have had something to do with it.

Briefly, the decision reached was this. Rex would go direct to Mino with the *Tavona* and wait there for the others to join him. This they would do when they had seen all that those two great worlds Romunda and Terromagna, had to show them.

And so it fell out that the next morning Rex said good-bye to Dominov and Multova, and having thanked them for their generous hospitality went to the *Tavona* with his old friends and was soon on his way to his own Solar System. He felt more at home when he could once more see Earth in the distance, with its moon in its proper place. As he told Vargo, after having seen what he had seen it was a relief to know they were still there. Even from Mino he felt as a traveller on Earth may feel after a long absence when he once more sees the white cliffs of Dover.

He spent ten very pleasant days on the comfortable little planetoid, most of the time with his girl friend Morino, Borron's daughter. They had some fun wing-flying, a sport at which Morino was an expert, and sometimes with others had a game of football which had become a popular pastime. The ball he had presented to the boys on a previous occasion was getting badly worn, so he promised to bring a new one next time he came to see them. One day he made a trip in the *Tavona* to Mars, the ship having to go there to take some stores.

It was all very gay, and he had so far settled down that he was almost sorry to see a Terromagnian ship come in bringing his father and the rest of the party.

That marked almost the end of the expedition, for with the *Tavona* in demand for other services Gator said that unless they wished to stay on Mino for a long time he would have to take them home right away.

So, with mixed feelings, for when it came to parting Rex was always sorry to say good-bye, farewells were said, and the *Tavona* took off for its comparatively short run to Earth. Vargo accompanied his friends, primarily —or so he said—to collect a few packets of tea, the refreshing beverage unique to Earth, for which he had developed a taste.

With a peculiar tugging at the heartstrings Rex watched his home planet, with its old familiar outlines, coming closer, one hemisphere in the bright light of day, the other sombre under the curtain of night. Rather than risk being seen the *Tavona* waited for a while, just inside the atmosphere, until

darkness embraced the Scottish Highlands, before putting down its feet in the heather near Glensalich Castle, the Professor's home, in its lonely glen.

As they walked down the hill Rex drew deep breaths of the sweet fresh air. Even with his eyes shut he would have known he was back home. Every planet had its own particular smells and Earth was unmistakable. He could have sung with elation, for homecomings are always a happy event, and, as he had discovered, from the greater the distance the greater the joy.

Vargo, Gator and Borron, declined the Professor's invitation to stay for a few days, saying that if the ship were seen it might lead to a difficult situation for everyone. Which of course was true. So after a quick pot of tea in the hall, with a few spare packets of the dry leaf in their pockets they trudged back to where the ship stood waiting in the moonlight.

Rex went with them to the top of the hill and saw them off on the return journey to their own world. Then, deep in thought, feeling suddenly very tired and subdued by what he had seen, he walked back slowly to the house and a prosaic meal of cold roast beef and potatoes.

He was glad to be home.

THE END

TRANSCRIBER NOTES

Misspelled words and printer errors have been corrected. Where multiple spellings occur, majority use has been employed.

Punctuation has been maintained except where obvious printer errors occur.

Illustrations by Leslie Stead. Some illustrations were moved to facilitate page layout.

[The end of *To Worlds Unknown--A Story of Interplanetary Exploration* by Capt. W. E. (William Earl) Johns]