

Second Dawn

by Arthur C. Clarke

Complete Novelet Of Worlds Beyond

The aftermath of victory was terrible, but even worse was the realization that there must be more wars, unless the necessity could be removed...

An A\NN/A Preservation Edition.

[Notes](#)

“HERE THEY come,” said Eris, rising to his fore-feet and turning to look down the long valley. For a moment the pain and bitterness had left his thoughts, so the even Jeryl, whose mind was more closely tuned to his than to any other, could scarcely detect it. There was even an undertone of softness that recalled poignantly the Eris she had known in the days before the War—the old Eris who now seemed almost as remote and as lost as if he were lying with all the others out there on the plain.

A dark tide was flowing up the valley, advancing with a curious hesitant motion, making odd pauses and little bounds forward. It was flanked with gold—the thin line of the Atheleni guards, so terrifyingly few compared with the black mass of the prisoners. But they were enough: indeed, they were only needed to guide that aimless river on its faltering way. Yet at the sight of so many thousands of the enemy, Jeryl found herself trembling; instinctively, she moved towards her mate, silver pelt resting against gold. Eris gave no sign that he had understood or even noticed the action.

The fear vanished as Jeryl saw how slowly the dark flood was moving forwards. She had been told what to expect, but the reality was even worse than she had imagined. As the prisoners came nearer, all the hate and bitterness ebbed from her mind, to be replaced by a sick compassion. No one of her race evermore need fear the aimless, idiot hoard that was being shepherded through the pass into the valley it would never leave again.

The guards were doing little more than urge the prisoners on with meaningless but encouraging cries, like nurses calling to infants too young to sense their thoughts. Strain as she might, Jeryl could detect no vestige of reason in any of those thousands of minds passing so near at hand. That brought home to her, more vividly than could anything else, the magnitude of the victory and of the defeat. Her mind was sensitive enough to detect the first faint thoughts of children, hovering on the verge of consciousness. The defeated enemy had become not even children, but babies with the bodies of adults.

The tide was passing within a few feet of them now. For the first time, Jeryl realized how much larger than her own people the Mithraneans were, and how beautifully the light of the twin suns gleamed on the dark satin of their bodies. Once a magnificent specimen, towering a full head above Eris, broke loose from the main body and came blundering towards them, halting a few paces away. Then it crouched down like a lost and frightened child, the splendid head moving uncertainly from side to side as if seeking it knew not what. For a moment the great, empty eyes fell full upon Jeryl’s face. She was as beautiful, she knew, to the Mithraneans as to her own race—but there was no flicker of emotion on the blank features, and no pause in the aimless movement of the questing head. Then an exasperated guard drove the prisoner back to his fellows.

“Come away,” Jeryl pleaded. “I don’t want to see any more. Why did you ever bring me here?” The

last thought was heavy with reproach.

Eris began to move away over the grassy slopes in great bounds that she could not hope to match, but as he went his mind threw its message back to hers. His thoughts were still gentle, though the pain beneath them was too deep to be concealed.

“I wanted everyone—even you—to see what we had to do to win the War. Then, perhaps, we will have no more in our lifetimes.”

HE WAS waiting for her on the brow of the hill undistressed by the mad violence of his climb. The stream of prisoners was now too far below for them to see the details of its painful progress. Jeryl crouched down beside Eris and began to browse on the sparse vegetation that had been exiled from the fertile valley. She was slowly beginning to recover from the shock. “But what will happen to them?” she asked presently, still haunted by the memory of that splendid, mindless giant going into a captivity it could never understand.

“They can be taught how to eat,” said Eris. “There is food in the valley for half a year, and then we’ll move them on. It will be a heavy strain on our own resources, but we’re under a moral obligation—and we’ve put it in the peace treaty.”

“They can never be cured?”

“No. Their minds have been destroyed; they’ll be like this until they die.”

There was a long silence. Jeryl let her gaze wander across the hills, falling in gentle undulations to the edge of the ocean. She could just make out, beyond a gap in the hills, the distant line of blue that marked the sea—the mysterious, impassible sea. Its blue would soon be deepening into darkness, for the fierce white sun was setting; presently there would only be the red disc—hundreds of times larger but giving far less light—of its pale companion.

“I suppose we had to do it,” Jeryl said at last. She was thinking almost to herself, but she let enough of her thoughts escape for Eris to overhear.

“You’ve seen them,” he answered briefly. “They were bigger and stronger than we. Though we outnumbered them, it was stalemate: in the end, I think they would have won. By doing what we did, we saved thousands from death—or mutilation.”

The bitterness came back into his thoughts, and Jeryl dared not look at him. He had screened the depths of his mind, but she knew that he was thinking of the shattered ivory stump upon his forehead. The War had been fought, except at the very end, with two weapons only—the razor-sharp hooves of the little, almost useless forepaws, and the splendid frontal horn that was the chief pride of every male. With this, Eris could never fight again, and from the loss stemmed much of the embittered harshness that sometimes made him hurt even those who loved him.

Eris was waiting for someone, though who it was Jeryl could not guess. She knew better than to interrupt his thoughts while he was in his present mood, and so remained silently beside him, her shadow merging with his as it stretched far along the hill-top.

Jeryl and Eris came of a race which, in Nature’s lottery, had been luckier than most—and yet had missed one of the greatest prizes of all. They had powerful bodies and powerful minds, and they lived in a world which was both temperate and fertile. By human standards, they would have seemed strange, but by no means repulsive. Their sleek, fur-covered bodies tapered to a single giant rear-limb that could send them leaping over the ground in thirty-foot bounds. The two fore-limbs were much smaller, and served

merely for support and steadying. They ended in pointed hooves that could be deadly in combat, but had no other useful purpose.

Both the Atheleni and their cousins, the Mithraneans, possessed mental powers that had enabled them to develop a very advanced mathematics and philosophy: but over the physical world they had no control at all. Houses, tools, clothes—indeed artifacts of any kind—were utterly unknown to them. To races which possessed hands, tentacles or other means of manipulation, their culture would have seemed incredibly limited: yet such is the adaptability of the mind, and the power of the commonplace, that they seldom realised their handicaps and could imagine no other way of life. It was natural to wander in great herds over the fertile plains, pausing where food was plentiful and moving on again when it was exhausted. This nomadic life had given them enough leisure for philosophy and even for certain arts. Their telepathic powers had not yet robbed them of their voices and they had developed a complex vocal music and an even more complex choreography. But they took the greatest pride of all in the range of their thoughts: for thousands of generations they had sent their minds roving through the misty infinities of metaphysics. Of *physics*, and indeed of all the sciences of matter, they knew nothing—not even that they existed,

“Someone’s coming,” said Jeryl suddenly. “Who is it?”

Eris did not bother to look, but there was a sense of strain in his reply.

“It’s Aretenon. I agreed to meet him here.”

“I’m so glad. You were such good friends once—it upset me when you quarrelled.”

Eris pawed fretfully at the turf, as he did when he was embarrassed or annoyed. “I lost my temper with him when he left me during the fifth battle of the Plain. Of course, I didn’t know then why he had to go.”

Jeryl’s eyes widened in sudden amazement and understanding. “You mean—he had something to do with the Madness, and the way the War ended?”

“Yes. There were very few people who knew more about the mind than he did. I don’t know what part he played, but it must have been an important one. I don’t suppose he’ll ever be able to tell us much about it.”

STILL A considerable distance below them, Aretenon was zig-zagging up the hillside in great leaps. A little later he had reached them, and instinctively bent his head to touch horns with Eris in the universal gesture of greeting. Then he stopped, horribly embarrassed; there was an awkward pause until Jeryl came to the rescue with some conventional remarks.

When Eris spoke, Jeryl was relieved to sense his obvious pleasure at meeting his friend again, for the first time since their angry parting at the height of the War. It had been longer still since her last meeting with Aretenon, and she was surprised to see how much he had changed. He was considerably younger than Eris—but no one would have guessed it now. Some of his once-golden pelt was turning black with age, and with a flash of his old humour Eris remarked that soon no one would be able to tell him from a Mithraean.

Aretenon smiled. “That would have been useful in the last few weeks. I’ve just come through their country, helping to round up the Wanderers. We weren’t very popular, as you might expect. If they’d known who I was, I don’t suppose I’d have got back alive—armistice or no armistice.”

“You weren’t actually in charge of the Madness, were you?” asked Jeryl, unable to control her

curiosity.

She had a momentary impression of thick, defensive mists forming around Aretenon's mind, shielding all his thoughts from the outer world. Then the reply came, curiously muffled, and with a sense of distance that was very rare in telepathic contact. "No: I wasn't in supreme charge. But there were only two others between myself and—the top."

"Of course," said Eris, rather petulantly, "I'm only an ordinary soldier and don't understand these things. But I'd like to know just how you did it. Naturally," he added, "neither Jeryl nor myself would talk to anyone else."

Again that veil seemed to descend over Aretenon's thoughts. Then it lifted, ever so slightly. "There's very little I'm allowed to tell. As you know, Eris, I was always interested in the mind and its workings. Do you remember the games we used to play, when I tried to uncover your thoughts, and you did your best to stop me? And how I sometimes made you carry out acts against your will?"

"I still think," said Eris, "that you couldn't have done that to a stranger, and that I was really unconsciously cooperating."

"That was true then—but it isn't any longer. The proof lies down there in the valley." He gestured towards the last stragglers who were being rounded up by the guards. The dark tide had almost passed, and soon the entrance to the valley would be closed.

"When I grew older," continued Aretenon, "I spent more and more of my time probing into the ways of the mind, and trying to discover why some of us can share our thoughts so easily, while others can never do so but must remain always isolated and alone, forced to communicate by sounds or gestures. And I became fascinated by those rare minds that are completely deranged, so that those who possess them seem less than children.

"I had to abandon these studies when the War began. Then, as you know, they called for me one day during the fifth battle. Even now, I'm not quite sure who was responsible for that. I was taken to a place a long way from here, where I found a little group of thinkers many of whom I already knew.

"The plan was simple—and tremendous. From the dawn of our race we've known that two or three minds, linked together, could be used to control another mind *if it was willing*, in the way that I used to control you. We've employed this power for healing since ancient times. Now we planned to use it for destruction.

"There were two main difficulties. One was bound up with that curious limitation of our normal telepathic powers—the fact that, except in rare cases, we can only have contact over a distance *with someone we already know*, and can communicate with strangers only when we are actually in their presence.

"The second, and greater problem, was that the massed power of many minds would be needed, and never before had it been possible to link together more than two or three. How we succeeded is our main secret: like all such things, it seems easy now it has been done. And once we had started, it was simpler than we had expected. Two minds are more than twice as powerful as one, and three are much more than thrice as powerful as a single will. The exact mathematical relationship is an interesting one. You know how very rapidly the number of ways a group of objects may be arranged increases with the size of the group? Well, a similar relationship holds in this case.

"So in the end we had our Composite Mind. At first it was unstable, and we could only hold it together for a few seconds, It's still a tremendous strain on our mental resources, and even now we can only do it for—well, for long enough.

“All these experiments, of course, were carried out in great secrecy. If we could do this, so could the Mithraneans, for their minds are as good as ours. We had a number of their prisoners, and we used them as subjects.”

FOR A MOMENT the veil that hid Aretenon’s inner thoughts seemed to tremble and dissolve, then he regained control. “That was the worst part. It was bad enough to send madness into a far land, but it was infinitely worse when you could watch with your own eyes the effects of what you did.

“When we had perfected our technique, we made the first long-distance test. Our victim was someone so well-known to one of our prisoners—whose mind we had taken over—that we could identify him completely and thus the distance between us was no objection. The experiment worked, but of course no one suspected that we were responsible.

“We did not operate again until we were certain that our attack would be so overwhelming that it would end the War. From the minds of our prisoners we had identified about a score of Mithraneans—their friends and kindred—in such detail that we could pick them out and destroy them. As each mind fell beneath our attack, it gave up to us the knowledge of others, and so our power increased. We could have done far more damage than we did, for we took only the males.”

“Was that,” said Jeryl bitterly, “so very merciful?”

“Perhaps not: but it should be remembered to our credit. We stopped as soon as the enemy sued for peace; and, as we alone knew what had happened, we went into their country to undo what damage we could. It was little enough.”

There was a long silence. The valley was deserted now, and the white sun had set. A cold wind was blowing over the hills, passing, where none could follow it, out across the empty and untravelled sea. Then Eris spoke, his thoughts almost whispering in Aretenon’s mind. “You did not come to tell me this, did you? There is something more.” It was a statement rather than a query.

“Yes,” replied Aretenon. “I have a message for you—one that will surprise you a good deal. It’s from Therodimus.”

“Therodimus! I thought—”

“You thought he was dead or worse still, a traitor. He’s neither, although he’s lived in enemy territory for the last twenty years. The Mithraneans treated him as we did, and gave him everything he needed. They recognized his mind for what it was, and even during the War no one touched him. Now he wants to see you again.”

WHATEVER emotions Eris was feeling at this news of his old teacher, he gave no sign of them. Perhaps he was recalling his youth, remembering now that Therodimus had played a greater part in the shaping of his mind than any other single influence. But his thoughts were barred to Aretenon and even to Jeryl.

“What’s he been doing all this time?” Eris asked at length. “And why does he want to see me now?”

“It’s a long and complicated story,” said Aretenon, “but Therodimus has made a discovery quite as remarkable as ours, and one that may have even greater consequences.”

“Discovery? What sort of discovery?”

Aretenon paused, looking thoughtfully along the valley. The guards were returning, leaving behind only

the few who would be needed to deal with any wandering prisoners.

“You know as much of our history as I do, Eris,” he began. “It took, we believe, something like a million generations for us to reach our present level of development—and that’s a tremendous length of time! Almost all the progress we’ve made has been due to our telepathic powers: without them we’d be little different from all those other animals that show such puzzling resemblances to us. We’re very proud of our philosophy and our mathematics, of our music and dancing—but have you ever thought, Eris, that there might be other lines of cultural development which we’ve never even dreamed of? *That there might be other forces in the Universe besides mental ones?*”

“I don’t know what you mean,” said Eris flatly.

“It’s hard to explain, and I won’t try—except to say this. Do you realise just how pitifully feeble is our control over the external world, and how useless these limbs of ours really are? No—you can’t, for you won’t have seen what I have. But perhaps this will make you understand.”

The pattern of Aretenon’s thoughts modulated suddenly into a minor key. “I remember once coming upon a bank of beautiful and curiously complicated flowers. I wanted to see what they were like inside, so I tried to open one, steadying it between my hooves and picking it apart with my teeth. I tried again and again—and failed. In the end, half mad with rage, I trampled all those flowers into the dirt.”

Jeryl could detect the perplexity in Eris’ mind, but she could see that he was interested and curious to know more.

“I have had that sort of feeling, too,” he admitted. “But what can one do about it? And after all, is it really important? There are a good many things in this universe which are not exactly as we should like them.”

Aretenon smiled. “That’s true enough. But Therodimus has found how to do something about it. Will you come and see him?”

“It must be a long journey.”

“About twenty days from here, and we have to go across a river.”

Jeryl felt Eris give a little shudder. The Atheleni hated water, for the excellent and sufficient reason that they were too heavily-boned to swim, and promptly drowned if they fell into it.

“It’s in enemy territory: they won’t like me.”

“They respect you, and it might be a good idea for you to go—a friendly gesture, as it were.”

“But I’m wanted here.”

“You can take my word that nothing you do here is as important as the message Therodimus has for you—and for the whole world.”

Eris veiled his thoughts for a moment, then uncovered them briefly.

“I’ll think about it,” he said.

2

IT WAS surprising how little Aretenon managed to say on the many days of the journey. From time to time Eris would challenge the defences of his mind with half-playful thrusts, but always they were

parried with an effortless skill. About the ultimate weapon that had ended the War he would say nothing, but Eris knew that those who had wielded it had not yet disbanded and were still at their secret hiding place. Yet, though he would not talk about the past, Aretenon often spoke of the future, with the urgent anxiety of one who had helped shape it and was not sure if he had acted aright. Like many others of his race, he was haunted by what he had done; the sense of guilt sometimes overwhelmed him. Often he made remarks which puzzled Eris at the time, but which he was to remember more and more vividly in the years ahead.

“We’ve come to a turning-point in our history, Eris. The powers we’ve uncovered will soon be shared by the Mithraneans, and another war will mean destruction for us both. All my life I’ve worked to increase our knowledge of the mind; but now I wonder if I’ve brought something into the world that is too powerful, and too dangerous, for us to handle. Yet—it’s too late, now, to retrace our footsteps: sooner or later our culture was bound to come to this point, and to discover what we have found.

“It’s a terrible dilemma and there’s only one solution. We cannot go back, and if we go forward we may meet disaster. So we must change the very nature of our civilisation, and break completely with the million generations behind us. You can’t imagine how that could be done: nor could I, until I met Therodimus and he told me of his dream.

“The mind is a wonderful thing, Eris—but by itself it is helpless in the universe of matter. We know now how to multiply the power of our brains by an enormous factor: we can solve, perhaps, the great problems of mathematics that have baffled us for ages. But neither our unaided minds, nor the group-mind we’ve now created, can alter in the slightest the one fact that all through history has brought us and the Mithraneans into conflict—the fact that the food supply is fixed and our populations are not.” Jeryl would watch them, taking little part in their thoughts, as they argued these matters. Most of their discussions took place while they were browsing, for like all active ruminants they had to spend a considerable part of each day searching for food. Fortunately, the land through which they were passing was extremely fertile—indeed, its fertility had been one of the causes of the War. Eris, Jeryl was glad to see, was becoming something of his old self again. The feeling of frustrated bitterness that had filled his mind for so many months had not lifted, but it was no longer as all-pervading as it had been.

THEY LEFT the open plain on the twenty-second day of their journey. For a long time they had been travelling through Mithraean territory, but those few of their ex-enemies they had seen had been inquisitive rather than hostile. Now the grasslands were coming to an end, and the forest with all its primeval terrors lay ahead.

“Only one carnivore lives in this region,” Aretenon reassured them, “and it’s no match for the three of us. We’ll be past the trees in a day and a night.”

“A night—in the forest!” gasped Jeryl, half petrified with terror at the very thought.

Aretenon was obviously a little ashamed of himself. “I didn’t like to mention it before,” he apologised, “but there’s really no danger. I’ve done it by myself, several times. After all, none of the great flesh-eaters of ancient times still exists—and it won’t be really dark, even in the woods. The red sun will still be up.”

Jeryl was still trembling slightly. She came of a race which, for thousands of generations, had lived on the high hills and the open plains, relying on speed to escape from danger. The thought of going among trees—and in the dim red twilight while the primary sun was down—filled her with panic. And of the three of them, only Aretenon possessed a horn with which to fight. (It was nothing like so long or sharp, thought Jeryl, as Eris’ had been.)

She was still not at all happy, even when they had spent a completely uneventful day moving through

the woods. The only animals they saw were tiny, long-tailed creatures that ran up and down the tree trunks with amazing speed, gibbering with anger as the intruders passed. It was entertaining to watch them, but Jeryl did not think that the forest would be quite so amusing in the night.

Her fears were well founded. When the fierce white sun passed below the trees, and the crimson shadows of the red giant lay everywhere, a change seemed to come over the world. A sudden silence swept across the forest—a silence abruptly broken by a very distant wail towards which the three of them turned instinctively, ancestral warnings shrieking in their minds.

“What was that?” gasped Jeryl.

Aretenon was breathing swiftly, but his reply was calm enough. “Never mind,” he said. “It was a long way off. I don’t know what it was.”

And Jeryl knew that he was lying.

They took turns to keep guard, and the long night wore slowly away. From time to time Jeryl would awaken from troubled dreams into the nightmare reality of the strange, distorted trees gathered threateningly around her. Once, when she was on guard, she heard the sound of a heavy body moving through the woods very far away—but it came no nearer and she did not disturb the others. So at last the longed-for brilliance of the white sun began to flood the sky, and the day had come again.

Aretenon, Jeryl thought, was probably more relieved than he pretended to be. He was almost boyish as he frisked around in the morning sunlight, snatching an occasional mouthful of foliage from an overhanging branch.

“We’ve only half a day to go now,” he said cheerfully. “We’ll be out of the forest by noon.”

There was a mischievous undertone to his thoughts that puzzled Jeryl. It seemed as if Aretenon was keeping still another secret from them, and Jeryl wondered what further obstacles they would have to overcome. By midday she knew, for their way was barred by a great river flowing slowly past them as if in no haste to meet the sea.

Eris looked at it with some annoyance, measuring it with a practised eye. “It’s much too deep to ford here. We’ll have to go a long way upstream before we can cross.”

Aretenon smiled. “On the contrary,” he said cheerfully, “we’re going *downstream*.”

Eris and Jeryl looked at him in amazement.

“Are you mad?” Eris cried.

“You’ll soon see. We’ve not far to go now—you’ve come all this way, so you might as well trust me for the rest of the journey.”

THE RIVER slowly widened and deepened. If it had been impassable before, it was doubly so now. Sometimes, Eris knew, one came upon a stream across which a tree had fallen, so that one could walk over on the trunk—though it was a risky thing to do. But this river was the width of many trees, and was growing no narrower.

“We’re nearly there,” said Aretenon at last. “I recognize the place. Someone should be coming out of those woods at any moment.” He gestured with his horn to the trees on the far side of the river, and almost as he did so three figures came bounding out on to the bank. Two of them, Jeryl saw, were Atheleni: the third was a Mithranean.

They were now nearing a great tree, standing by the water's edge, but Jeryl had paid it little attention: she was too interested in the figures on the distant bank, wondering what they were going to do next. So when Eris' amazement exploded like a thunderclap in the depths of her own mind, she was too confused for a moment to realise its cause. Then she turned towards the tree, and saw what Eris had seen.

To some minds and some races, few things could have been more natural or more commonplace than a thick rope tied round a tree trunk, and floating out across the waters of a river to another tree on the far bank. Yet it filled both Jeryl and Eris with the terror of the unknown, and for one awful moment Jeryl thought that a gigantic snake was emerging from the water. Then she saw that it was not alive, but her fear remained. For it was the first artificial object that she had ever seen.

"Don't worry about *what* it is, or how it was put there," counselled Aretenon. "It's going to carry you across, and that's all that matters for the moment. Look—there's someone coming over now!"

One of the figures on the far bank had lowered itself into the water, and was working its way with its forelimbs along the rope. As it came nearer—it was the Mithranean, and a female—Jeryl saw that it was carrying a second and much smaller rope looped round the upper part of its body.

With the skill of long practice, the stranger made her way across the floating cable, and emerged dripping from the river. She seemed to know Aretenon, but Jeryl could not intercept their thoughts.

"I can go across without any help," said Aretenon, "but I'll show you the easy way."

He slipped the loop over his shoulders, and, dropping into the water, hooked his fore-limbs over the fixed cable. A moment later he was being dragged across at a great speed by the two others on the far bank, where, after much trepidation, Eris and Jeryl presently joined him.

It was not the sort of bridge one would expect from a race which could quite easily have dealt with the mathematics of a reinforced concrete arch—if the possibility of such an object had ever occurred to it. But it served its purpose, and once it had been made, they could use it rapidly enough.

Once it had been made. But—who had made it?

WHEN their dripping guides had rejoined them, Aretenon gave his friends a warning. "I'm afraid you're going to have a good many shocks while you're here. You'll see some very strange sights, but when you understand them, they'll cease to puzzle you in the slightest. In fact, you will soon come to take them for granted."

One of the strangers, whose thoughts neither Eris nor Jeryl could intercept, was giving him a message.

"Therodimus is waiting for us," said Aretenon. "He's very anxious to see you."

"I've been trying to contact him," complained Eris, "but I've not succeeded."

Aretenon seemed a little troubled. "You'll find he's changed," he said. "And after all, you've not seen each other for many years. It may be some time before you can make full contact again."

Their road was a winding one through the forest, and from time to time curiously narrow paths branched off in various directions. Therodimus, thought Eris, must have changed indeed for him to have taken up permanent residence among trees. Presently the track opened out into a large, semi-circular clearing with a low white cliff lying along its diameter. At the foot of the cliff were several dark holes of varying sizes—obviously the openings of caves.

It was the first time that either Eris or Jeryl had ever entered a cave, and they did not greatly look forward to the experience. They were relieved when Aretenon told them to wait just outside the opening,

and went on alone towards the puzzling yellow light that glowed in the depths. A moment later, dim memories began to pulse in Eris' mind, and he knew that his old teacher was coming, even though he could no longer fully share his thoughts.

Something stirred in the gloom, and then Therodimus came out into the sunlight. At the sight of him, Jeryl screamed once and buried her head in Eris' mane, but Eris stood firm, though he was trembling as he had never done before battle. For Therodimus blazed with a magnificence that none of his race had ever known since history began. Around his neck hung a band of glittering objects that caught and refracted the sunlight in a myriad colours, while covering his body was a sheet of some thick, many-hued material that rustled softly as he walked. And his horn was no longer the yellow of ivory: some magic had changed it to the most wonderful purple that Jeryl had ever seen.

Therodimus stood motionless for a moment, savouring their amazement to the full. Then his rich laugh echoed in their minds, and he reared up upon his hind limb. The coloured garment fell whispering to the ground, and at a toss of his head the glittering necklace arced like a rainbow into a corner of the cave. But the purple horn remained unchanged.

It seemed to Eris that he stood at the brink of a great chasm, with Therodimus beckoning to him on the far side. Their thoughts struggled to form a bridge, but could make no contact. Between them was the gulf of half a lifetime and many battles, of a myriad unshared experiences—Therodimus' years in this strange land, his own mating with Jeryl and the memory of their lost children. Though they stood face to face, a few feet only between them, their thoughts could never meet again.

Then Aretenon, with all the power and authority of his unsurpassed skill, did something to his mind that Eris was never quite able to recall. He only knew that the years seemed to have rolled back, that he was once more the eager, anxious pupil—and that he could speak to Therodimus again.

3

IT WAS strange to sleep underground, but less unpleasant than spending the night amid the unknown terrors of the forest. As she watched the crimson shadows deepening beyond the entrance of the little cave, Jeryl tried to collect her scattered thoughts. She had understood only a small part of what had passed between Eris and Therodimus, but she knew that something incredible was taking place. The evidence of her eyes was enough to prove that: today she had seen things for which there were no words in her language.

She had heard things, too. As they had passed one of the cave-mouths, there had come from it a rhythmic, “whirring” sound, unlike that made by any animal she knew. It had continued steadily without pause or break as long as she could hear it, and even now its unhurried rhythm had not left her mind. Aretenon, she believed, had also noticed it, though without any surprise: Eris had been too engrossed with Therodimus.

The old philosopher had told them very little, preferring, as he said, to show them his empire when they had had a good night's rest. Nearly all their talk had been concerned with the events of their own land during the last few years, and Jeryl found it somewhat boring. Only one thing had interested her, and she had eyes for little else. That was the wonderful chain of coloured crystals that Therodimus had worn around his neck. What it was, or how it had been created, she could not imagine: but she coveted it. As she fell asleep, she found herself thinking idly, but more than half seriously, of the sensation it would cause if she returned to her people with such a marvel gleaming against her own pelt. It would look so much better there than upon old Therodimus.



Aretenon and Therodimus met them at the cave soon after dawn. The philosopher had discarded his regalia—which he had obviously worn only to impress his guests—and his horn had returned to its normal yellow. That was one thing Jeryl thought she could understand, for she had come across fruits whose juices could cause such colour changes.

Therodimus settled himself at the mouth of the cave. He began his narration without any preliminaries, and Eris guessed that he must have told it many times before to earlier visitors.

“I came to this place, Eris, about five years after leaving our country. As you know, I was always interested in strange lands, and from the Mithraneans I’d heard rumours that intrigued me very much. How I traced them to their source is a long story that doesn’t matter now. I crossed the river far up-stream one summer, when the water was very low. There’s only one place where it can be done, and then only in the driest years. Higher still the river loses itself in the mountains, and I don’t think there’s any way through them. So this is virtually an island—almost completely cut off from Mithranean territory.

“It’s an island, but it’s not uninhabited. The people who live here are called the Phileni, and they have a very remarkable culture—one entirely different from our own. Some of the products of the culture you’ve already seen.

“As you know, there are many different races on our world, and quite a few of them have some sort of intelligence. But there is a great gulf between us and all other creatures. As far as we know, we are the only beings capable of abstract thought and complex logical processes.

“The Phileni are a much younger race than ours, and they are intermediate between us and the other animals. They’ve lived here on this rather large island for several thousand generations—but their rate of development has been many, many times swifter than ours. They neither possess nor understand our telepathic powers, but they have something else which we may well envy—something which is responsible for the whole of their civilization and its incredibly rapid progress.”

Therodimus paused, then rose slowly to his feet.

“Follow me,” he said. “I’ll take you to see the Phileni.”

HE LED them back to the caves from which they had come the night before, pausing at the entrance from which Jeryl had heard that strange, rhythmic whirring. It was clearer and louder now, and she saw Eris start as though he had noticed it for the first time. Then Therodimus uttered a high-pitched whistle, and at once the whirring slackened, falling octave by octave until it had ebbed into silence. A moment later something came towards them out of the semi-gloom.

It was a little creature, scarcely half their height, and it did not hop, but walked upon two jointed limbs that seemed very thin and feeble. Its large spherical head was dominated by three huge eyes, set far apart and capable of independent movement. With the best will in the world, Jeryl did not think it was very attractive.

Then Therodimus uttered another whistle, and the creature raised its fore-limbs towards them.

“Look closely,” said Therodimus, very gently, “and you will see the answer to many of your questions.”

For the first time, Jeryl saw that the creature’s fore-limbs did not end in hooves, or indeed after the fashion of any animal with which she was acquainted. Instead, they divided into at least a dozen thin, flexible tentacles and two hooked claws.

“Go towards it, Jeryl,” commanded Therodimus. “It has something for you.”

Hesitantly, Jeryl moved forward. She noticed that the creature's body was crossed with bands of some dark material, to which were attached unidentifiable objects. It dropped a fore-limb to one of these, and a cover opened to reveal a cavity inside which something glittered. Then the little tentacles were clutching that marvellous crystal necklace, and with a movement so swift and dexterous that Jeryl could scarcely follow it, the Phileni moved forward and clasped it round her neck.

Therodimus brushed aside her confusion and gratitude, but his shrewd old mind was well pleased. Jeryl would be his ally now in whatever he planned to do. But Eris' emotions might not be so easily swayed, and in this matter mere logic was not enough. His old pupil had changed so much, had been so deeply wounded by the past, that Therodimus could not be certain of success. Yet he had a plan that could turn even these difficulties to his advantage.

He gave another whistle, and the Phileni made a curious waving gesture with its hands and disappeared into the cave. A moment later that strange whirring ascended once more from the silence, but Jeryl's curiosity was now quite overshadowed by her delight in her new possession.

"We'll go through the woods," said Therodimus, "to the nearest settlement—it's only a little way from here. The Phileni don't live in the open, as we do. In fact, they differ from us in almost every conceivable way. I'm even afraid," he added ruefully, "that they're much better-natured than we are, and I believe that one day they'll be more intelligent. But first of all, let me tell you what I've learned about them, so that you can understand what I'm planning to do."



The mental evolution of any race is conditioned, even dominated, by physical factors which that race almost invariably takes for granted as part of the natural order of things. The wonderfully sensitive hands of the Phileni had enabled them to find by experiment and trial facts which had taken the planet's only other intelligent species a thousand times as long to discover by pure deduction. Quite early in their history, the Phileni had invented simple tools. From these they had proceeded to fabrics, pottery, and the use of fire. When Therodimus had discovered them, they had already invented the lathe and the potter's wheel, and were about to move into their first Metal Age with all that that implied.

On the purely intellectual plane, their progress had been less rapid. They were clever and skillful, but they had a dislike of abstract thought and their mathematics was purely empirical. They knew, for example, that a triangle with sides in the ratio three-four-five was right-angled, but had not suspected that this was only a special case of a much more general law. Their knowledge was full of such yawning gaps, which despite the help of Therodimus and his several score disciples, they seemed in no great hurry to fill.

Therodimus they worshipped as a god, and for two whole generations of their short-lived race they had obeyed him in everything, giving him all the products of their skill that he needed, and making at his suggestion the new tools and devices that had occurred to him. The partnership had been incredibly fertile, for it was as if both races had suddenly been released from their shackles. Great manual skill and greater intellectual powers had fused in a fruitful union probably unique in all the universe—and progress that would normally have taken millenia had been achieved in less than a decade.

AS ARETENON had promised them, though Eris and Jeryl saw many marvels, they came across nothing that they could not understand once they had watched the little Phileni craftsmen at work and had seen with what magic their hands shaped natural materials into lovely or useful forms. Even their tiny towns and primitive farms soon lost their wonder and became part of the accepted order of things.

Therodimus let them look their fill, until they had seen every aspect of this strangely sophisticated stone-age culture. Because they knew no differently, they found nothing incongruous in the sight of a Phileni potter—who could scarcely count beyond ten—shaping a series of complex algebraic surfaces

under the guidance of a young Mithranean mathematician. Like all his race, Eris possessed tremendous powers of mental visualization, but he realized how much easier geometry would be if one could actually *see* the shapes one was considering. From this beginning (though he could not guess it) would one day evolve the idea of a written language.

Jeryl was fascinated above all things by the sight of the little Phileni women weaving fabrics upon their primitive looms. She could sit for hours watching the flying shuttles and wishing that she could use them. Once one had seen it done, it seemed so simple and so obvious—and so utterly beyond the power of the clumsy, useless limbs of her own people.

They grew very fond of the Phileni, who seemed eager to please and were pathetically proud of all their manual skills. In these new and novel surroundings, meeting fresh wonders every day, Eris seemed to be recovering from some of the scars which the War had left upon his mind. Jeryl knew, however, that there was still much damage to be undone. Sometimes, before he could hide them, she would come across raw, angry wounds in the depths of Eris' mind, and she feared that many of them—like the broken stump of his horn—would never heal. Eris had hated the War, and the manner of its ending still oppressed him. Beyond this, Jeryl knew, he was haunted by the fear that it might come again.

These troubles she often discussed with Therodimus, of whom she had now grown very fond. She still did not fully understand why he had brought them here, or what he and his followers were planning to do. Therodimus was in no hurry to explain his actions, for he wished Jeryl and Eris to draw their own conclusions as far as possible. But at last, five days after their arrival, he called them to his cave.

“You’ve now seen,” he began, “most of the things we have to show you here. You know what the Phileni can do, and perhaps you have thought how much our own lives will be enriched once we can use the products of their skill. That was my first thought when I came here, all those years ago.”

“It was an obvious and rather naive idea, but it led to a much greater one. As I grew to know the Phileni, and found how swiftly their minds had advanced in so short a time, I realized what a fearful disadvantage our own race had always laboured under. I began to wonder how much further forward *we* would have been had we the Phileni’s control over the physical world. It is not a question of mere convenience, or the ability to make beautiful things like that necklace of yours, Jeryl, but something much more profound. It is the difference between ignorance and knowledge, between weakness and power.”

“We have developed our minds, and our minds alone, until we can go no further. As Aretenon has told you, we have now come to a danger that threatens our entire race. We are under the shadow of the irresistible weapon against which there can be no defense.

“The solution is, quite literally, in the hands of the Phileni. We must use their skills to reshape our world, and so remove the cause of all our wars. We must go back to the beginning and re-lay the foundations of our culture. It won’t be *our* culture alone, though, for we shall share it with the Phileni. They will be the hands—we the brains. Oh, I have dreamed of the world that may come, ages ahead, when even the marvels you see around you now will be considered childish toys! But not many are philosophers, and I need an argument more substantial than dreams. That final argument I believe I may have found, though I cannot yet be certain.

“I have asked you here, Eris, partly because I wanted to renew our old friendship, and partly because your word will now have far greater influence than mine. You are a hero among your own people, and the Mithraneans also will listen to you. I want you to return, taking with you some of the Phileni and their products. Show them to your people, and ask them to send their young men here to help us with our work.”

There was a pause during which Jeryl could gather no hint of Eris’ thoughts. Then he replied

hesitantly: “But I still don’t understand. These things that the Phileni make are very pretty, and some of them may be useful to us. But how can they change us as profoundly as you seem to think?”

Therodimus sighed. Eris could not see past the present into the future that was yet to be. He had not caught, as Therodimus had done, the promise that lay beyond the busy hands and tools of the Phileni—the first faint intimations of the Machine. Perhaps he would never understand: but he could still be convinced.

Veiling his deeper thoughts, Therodimus continued: “Perhaps some of these things are toys, Eris—but they may be more powerful than you think. Jeryl, I know, would be loath to part with hers...and perhaps I can find one that would convince you.”

Eris was sceptical, and Jeryl could see that he was in one of his darker moods. “I doubt it very much,” he said.

“Well, I can try.” Therodimus gave a whistle, and one of the Phileni came running up. There was a short exchange of conversation.

“Would you come with me, Eris? It will take some time.”

ERIS FOLLOWED him, the others, at Therodimus’ request, remaining behind. They left the large cave and went towards the row of smaller ones which the Phileni used for their various trades.

The strange whirring was sounding loudly in Eris’ ears, but for a moment he could not see its cause, the light of the crude oil lamps being too faint for his eyes. Then he made out one of the Phileni bending over a wooden table upon which something was spinning rapidly, driven by a belt from a treadle operated by another of the little creatures. He had seen the potters using a similar device, but this was different. It was shaping wood, not clay, and the potter’s fingers had been replaced by a sharp metal blade from which long, thin shavings were curling out in fascinating spirals. With their huge eyes the Phileni, who disliked full sunlight, could see perfectly in the gloom, but it was some time before Eris could discover just what was happening, then suddenly he understood.



“Aretenon,” said Jeryl when the others had left them, “why should the Phileni do all these things for us? Surely they’re quite happy as they are?”

The question, Aretenon thought, was typical of Jeryl and would never have been asked by Eris.

“They will do anything that Therodimus says,” he answered; “but even apart from that, there’s so much we can give them as well. When we turn our minds to their problems, we can see how to solve them in ways that would never have occurred to them. They’re very eager to learn, and already we must have advanced their culture by hundreds of generations. Also, they’re physically very feeble. Although we don’t possess their dexterity, our strength makes possible tasks they could never attempt.”

They had wandered to the edge of the river, and stood for a moment watching the unhurried waters moving down to the sea. Then Jeryl turned to go upstream, but Aretenon stopped her.

“Therodimus doesn’t want us to go that way, yet,” he explained. “It’s just another of his little secrets; he never likes to reveal his plans until they’re ready.”

Slightly piqued, and distinctly curious, Jeryl obediently turned back. She would, of course, come this way again as soon as there was no one else about.

It was very peaceful here in the warm sunlight, among the pools of heat trapped by the trees. Jeryl

had almost lost her fear of the forests though she knew she would never be quite happy there.

Aretenon seemed very abstracted, and Jeryl knew that he wished to say something and was marshalling his thoughts. Presently he began to speak, with the freedom that is only possible between two people who are fond of each other but have no emotional ties.

“It is very hard, Jeryl,” he began, “to turn one’s back on the work of a lifetime. Once I had hoped that the great new forces we have discovered could be safely used, but now I know that is impossible, at least for many ages. Therodimus was right—we can go no further with our minds alone. Our culture has been hopelessly one-sided, though through no fault of ours. We cannot solve the fundamental problems of peace and war without a command over the physical world such as the Phileni possess—and which we hope to borrow from them.

“Perhaps there will be other great adventures here for our minds, to make us forget what we have had to abandon. We shall be able to learn something from Nature at last. What is the difference between fire and water, between wood and stone? What are the suns, and what are those millions of faint lights we see in the sky when both the suns are down? Perhaps the answers to all these questions may lie at the end of the new road along which we must travel.”

He paused.

“New knowledge—new wisdom—in realms we have never dreamed of before. It may lure us away from the dangers we have encountered: for certainly nothing we can learn from Nature will ever be as great a threat as the peril we have uncovered in our own minds.”

The flow of Aretenon’s thoughts was suddenly interrupted. Then he said: “I think that Eris wants to see you.”

Jeryl wondered why Eris had not sent the message to her: she wondered, too, at the undertone of amusement—or was it something else?—in Aretenon’s mind.

THERE WAS no sign of Eris as they approached the caves, but he was waiting for them and came bounding out into the sunlight before they could reach the entrance. Then Jeryl gave an involuntary cry, and retreated a pace or two as her mate came towards her.

For Eris was whole again. Gone was the shattered stump on his forehead: it had been replaced by a new, gleaming horn no less splendid than the one that he had lost.

In a belated gesture of greeting, Eris touched horns with Aretenon. Then he was gone into the forest in great joyous leaps—but not before his mind had met Jeryl’s as it had seldom done since the days before the War.

“Let him go,” said Therodimus softly. “He would rather be alone. When he returns, I think you will find him—different.” He gave a little laugh. “The Phileni are clever, are they not? Now, perhaps, Eris will be more appreciative of their ‘toys’.”

“I know I am impatient,” said Therodimus, “but I am old now, and I want to see the changes begin in my own lifetime. That is why I am starting so many schemes in the hope that some at least will succeed. But this is the one, above all, in which I have put most faith.”

For a moment he lost himself in his thoughts. Not one in a hundred of his own race could fully share his dream. Even Eris, though he now believed in it, did so with his heart rather than his mind. Perhaps Aretenon—the brilliant and subtle Aretenon, so desperately anxious to neutralize the powers he had brought into the world—might have glimpsed the reality. But his was of all minds the most impenetrable,

save when he wished otherwise.

“You know as well as I do,” continued Therodimus, as they walked upstream, “that our wars have only one cause—Food. We and the Mithraneans are trapped on this continent of ours with its limited resources, which we can do nothing to increase. Ahead of us we have always the nightmare of starvation, and for all our vaunted intelligence there has been nothing we can do about it. Oh yes, we have scraped some laborious irrigation ditches with our fore-hooves, but how slight their help has been!

“The Phileni have discovered how to grow crops that increase the fertility of the ground many-fold. I believe that we can do the same—once we have adapted their tools for our own use. That is our first and most important task, but it is not the one on which I have set my heart. The final solution to Our problem, Eris, *must be the discovery of new, virgin lands into which our people can migrate*”

He smiled at the other’s amazement.

“No, don’t think I’m mad. Such lands do exist, I’m sure of it. Once I stood at the edge of the ocean and watched a great flight of birds coming inland from far out at sea. I have seen them flying outwards, too, so purposefully that I was certain they were going to some other country. And I have followed them with my thoughts.”

“Even if your theory is true, as it probably is,” said Eris, “what use is it to us?” He gestured to the river flowing beside them. “We drown in the water, and you cannot build a rope to support us—” His thoughts suddenly faded out into a jumbled chaos of ideas.

Therodimus smiled. “So you have guessed what I hope to do. Well, now you can see if you are right.”

They had come to a level stretch of bank, upon which a group of the Phileni were busily at work, under the supervision of some of Therodimus’ assistants. Lying at the water’s edge was a strange object which, Eris realized, was made of many tree-trunks joined together by ropes.

They watched in fascination as the orderly tumult reached its climax. There was a great pulling and pushing, and the raft moved ponderously into the water with a mighty splash. The spray had scarcely ceased to fall when a young Mithranean leaped from the bank and began to dance gleefully upon the logs, which were now tugging at the moorings as if eager to break away and follow the river down to the sea. A moment later he had been joined by others, rejoicing in their mastery of a new element. The little Phileni, unable to make the leap, stood watching patiently on the bank while their masters enjoyed themselves.

There was an exhilaration about the scene that no one could fail to miss, though perhaps few of those present realized that they were at a turning point in history. Only Therodimus stood a little apart from the rest, lost in his own thoughts. This primitive raft, he knew, was merely a beginning. It must be tested upon the river, then along the shores of the ocean. The work would take years, and he was never likely to see the first voyagers returning from those fabulous lands whose existence was still no more than a guess. But what had been begun, others would finish.

Overhead, a flight of birds was passing across the forest. Therodimus watched them go, envying their freedom to move at will over land and sea. He had begun the conquest of the water for his race, but that the skies might one day be theirs also was beyond even his imagination.

ARETENON, Jeryl and the rest of the expedition had already crossed the river when Eris said good-bye to Therodimus. This time they had done so without a drop of water touching their bodies, for the raft had come down-stream and was performing valuable duties as a ferry. A new and much

improved model was already under construction, as it was painfully obvious that the prototype was not exactly seaworthy. These initial difficulties would be quickly overcome by designers who, even if they were forced to work with stone-age tools, could handle with ease the mathematics of metacenters, buoyancies and advanced hydrodynamics.

“Your task won’t be a simple one,” said Therodimus, “for you cannot show your people all the things you have seen here. At first you must be content to sow the seed, to arouse interest and curiosity—particularly among the young, who will come here to learn more. Perhaps you will meet opposition: I expect so. But every time you return to us, we shall have new things to show you and to strengthen your arguments.”

They touched horns: then Eris was gone, taking with him the knowledge that was to change the world—so slowly at first, then ever more swiftly. Once the barriers were down, once the Mithraneans and the Atheleni had been given the simple tools which they could fasten to their fore-limbs and use unaided, progress would be swift. But for the present they must rely on the Phileni for everything: and there were so few of them.

Therodimus was well content. Only in one respect was he disappointed, for he had hoped that Eris, who had always been his favorite, might also be his successor. The Eris who was now returning to his own people was no longer self-obsessed or embittered, for he had a mission and hope for the future. But he lacked the keen, far-ranging vision that was needed here: it would be Aretenon who must continue what he had begun. Still, that could not be helped, and there was no need yet to think of such matters. Therodimus was very old, but he knew that he would be meeting Eris many times again here by the river at the entrance to his land.

4

THE FERRY was gone now, and though he had expected it, Eris stopped amazed at the great span of the bridge, swaying slightly in the breeze. Its execution did not quite match its design—a good deal of mathematics had gone into its parabolic suspension—but it was still the first great engineering feat in history. Constructed though it was entirely of wood and rope, it forecast the shape of the metal giants to come.

Eris paused in mid-stream. He could see smoke rising from the shipyards facing the ocean, and thought he could just glimpse the masts of some of the new vessels that were being built for coastal trade.

Aretenon was waiting for them on the far bank. He moved rather slowly now, but his eyes were still bright with the old, eager intelligence. He greeted Eris warmly. “I’m glad you could come now. You’re just in time.”

“The ships are back?”

“Almost: they were sighted an hour ago, out on the horizon. They should be here at any moment, and then we shall know the truth at last, after all these years. If only—”

His thoughts faded out, but Eris could continue them. They had come to the great pyramid of stones beneath which Therodimus lay—Therodimus, whose brain was behind everything they saw, but who could never learn now if his most cherished dream was true or not.

There was a storm coming up from the ocean, and they hurried along the new road that skirted the river’s edge. Small boats of a kind that Eris had not seen before went past them occasionally, operated by Atheleni or Mithraneans with wooden paddles strapped to their forelimbs. It always gave Eris great

pleasure to see such new conquests, such new liberations of his people from their age-old chains. Yet sometimes they reminded him of children who had suddenly been let loose into a wonderful new world, full of exciting and interesting things that must be done, whether they were likely to be useful or not. However, anything that promised to make his race into better sailors was more than useful. In the last decade Eris had discovered that pure intelligence was sometimes not enough: there were skills that could not be acquired by any amount of mental effort. Though his people had largely overcome their fear of water, they were still quite incompetent on the ocean, and the Phileni had therefore become the first navigators of the world.

Jeryl looked nervously around her as the first peal of thunder came rolling in from the sea. She was still wearing the necklace that Therodimus had given her so long ago: but it was by no means the only ornament she carried now.

“I hope the ships will be safe,” she said anxiously.

“There’s not much wind, and they will have ridden out much worse storms than this,” Aretenon reassured her, as they entered his cave, Eris and Jeryl looked round with eager interest to see what new wonders the Phileni had made during their absence: but if there were any they had, as usual, been hidden away until Aretenon was ready to show them. He was still rather childishly fond of such little surprises and mysteries.

There was an air of absent-mindedness about the meeting that would have puzzled an onlooker ignorant of its cause. As Eris talked of all the changes in the outer world, of the success of the new Phileni settlements, and of the steady growth of agriculture among his people, Aretenon listened with only half his mind. His thoughts, and those of his friends, were far out at sea, meeting the on-coming ships which might be bringing the greatest news their world had ever received.

AS ERIS finished his report, Aretenon rose to his feet and began to move restlessly around the chamber.

“You have done better than we dared to hope at the beginning. At least there has been no war for a generation, and our food supply is ahead of the population for the first time in history—thanks to our new agricultural techniques.”

Aretenon glanced at the furnishings of his chamber, recalling with an effort the fact that in his own youth almost everything he saw would have appeared impossible or even meaningless to him. Not even the simplest of tools had existed then, at least in the knowledge of his people. Now there were ships and bridges and houses—and these were only the beginning.

“I am well satisfied,” he said. “We have, as we planned, diverted the whole stream of our culture, turning it away from the dangers that lay ahead. The powers that made the Madness possible will soon be forgotten: only a handful of us still know of them, and we will take our secrets with us. Perhaps when our descendants rediscover them, they will be wise enough to use them properly. But we have uncovered so many new wonders that it may be a thousand generations before we turn again to look into our own minds and to tamper with the forces locked within them.”

The mouth of the cave was illuminated by a sudden flash of lightning. The storm was coming nearer, though it was still some miles away.

“While we’re waiting for the ships,” said Aretenon rather abruptly, “come into the next cave and see some of the new things we have to show you since your last visit.”

It was a strange collection. Side by side on the same bench were tools and inventions which in other

cultures had been separated by thousands of years of time. The Stone-Age was past: bronze and iron had come, and already the first crude scientific instruments had been built for experiments that were driving back the frontiers of the unknown. A primitive retort spoke of the beginnings of chemistry, and by its side were the first lenses that the world had seen—waiting to reveal the unsuspected universes of the infinitely small and the infinitely great.

The storm was upon them as Aretenon's description of these new wonders drew to its close.

"I've shown you everything of importance," he said, "but here's something that may amuse you while we're waiting. As I said, we've sent expeditions everywhere to collect and classify all the rocks they can, in the hope of finding useful minerals. One of them brought back this."

He extinguished the lights and the cave became completely dark.

"It will be some time before your eyes grown sensitive enough to see it," Aretenon warned. "Just look over there in that corner."

Eris strained his eyes into the darkness. At first he could see nothing: then slowly, a glimmering blue light became faintly visible. It was so vague and diffuse that he could not focus his eyes upon it, and he automatically moved forward.

"I shouldn't go too near," advised Aretenon. "It seems to be a perfectly ordinary mineral, but the Phileni who found it and carried it here got some very strange burns from handling it. Yet it's quite cold to the touch. One day we'll learn its secret: but I don't suppose it's anything at all important."

A VAST CURTAIN of sheet lightning split the sky, and for a moment the reflected glare lit up the cave, pinning weird shadows against the walls. At the same moment one of the Phileni staggered into the entrance and called something to Aretenon in its thin, reedy voice. He gave a great shout of triumph, then his thoughts came crashing into Eris' mind.

"Land! They've found land—a whole new continent waiting for us!"

Eris felt the sense of triumph and victory well up within him like water bursting from a spring. Clear ahead now into the future lay the new, the glorious road along which their children would travel, mastering the world and all its secrets as they went. The vision of Therodimus was at last sharp and brilliant before his eyes.

He felt for the mind of Jeryl, so that she could share his joy—and found that it was closed to him. Leaning towards her in the darkness, he could sense that she was still staring into the depths of the cave, as if she had never heard the wonderful news, and could not tear her eyes away from the enigmatic glow.

Out of the night came the roar of the belated thunder as it raced across the sky. Eris felt Jeryl tremble beside him, and sent out his thoughts to comfort her. "Don't let the thunder frighten you," he said gently. "What is there to fear now?"

"I do not know," replied Jeryl. "I am frightened—but not of the thunder. Oh, Eris, it is a wonderful thing we have done, and I wish that Therodimus could be here to see it. But where will it lead in the end—this new road of ours?"

Out of the past, the words that Aretenon had once spoken had risen up to haunt her. She remembered their walk by the river, long ago, when he had talked of his hopes and had said: "Certainly nothing we can learn from Nature will ever be as great a threat as the peril we have uncovered in our own minds." Now the words seemed to mock her and to cast a shadow over the golden future: but why, she could not say.

Alone, perhaps, of all the races in the Universe, her people had reached the second cross-roads—and had never passed the first. Now they must go along the road that they had missed, and must face the challenge at its end—the challenge from which, this time, they could not escape.

In the darkness, the faint glow of dying atoms burned unwavering in the rock. It would still be burning there, scarcely dimmed, when Jeryl and Eris had been dust for centuries. It would be only a little fainter when the civilization they were building had at last unlocked its secrets.

The End.

Notes and proofing history

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