

OTHER WORLDS

STORIES

- Power Metal, Pt. 1 of 3** 6
S. J. Byrne (25,000 words)
- Heritage** 60
Boyd Ellanby (9,200 words)
- Babes in the Woods** 82
Gordon Dickson (6,500 words)
- The Cold, Cold Grave** 97
T. P. Caravan (2,000 words)
- Lost Continents VII** 102
L. Sprague deCamp (10,000 words)
- The Seven Black Priests** 126
Fritz Leiber (10,000 words)

FEATURES

- Editorial** 4
- Letters** 149
- Personals** 155
- Other Worlds Book Shelf** 160

MAY

1953

ISSUE No. 29

EDITORS

Ray Palmer

Bea Mahaffey

ART DIRECTOR

Malcolm H. Smith

Front Cover:

Malcolm H. Smith

Back Cover:

Robert Gibson Jones

On Sale the First Week of Every Month

CLARK PUBLISHING COMPANY, 806 Dempster Street, Evanston, Illinois

Entered as second-class matter at the Post Office at Evanston, Illinois. Additional entry at Chicago, Illinois. Printed in U.S.A. by the W. F. Hall Printing Company of Chicago, Illinois. Distributed by American News Company, Inc. of New York. No responsibility is undertaken for unsolicited manuscripts, photographs or artwork. Return envelope and sufficient return postage is required. Advertising rates at request. Subscriptions: 12 issues, \$3.00; 24 issues, \$6.00.



Faced with extinction, the chimps came to Man for aid—Man, who had rendered three-fourths of Earth uninhabitable—only to find that mankind was struggling hopelessly with the same problem.

HERITAGE

By Boyd Ellanby



Illustrated by Joe W. Tullioton

THE two old grandfathers loped along the forest path as fast as they could, following the messenger who was now nearly out of sight. But they knew the way.

"Why hurry?" said Yama. "We know what is happening."

"Yes. But I always hope that *this* time—Have you had an answer to your radio message?" Dr. Koa's shoulders were stooped, and his wide mouth had a melancholy droop. He was nearly breathless from the swiftness of their walk, and from anxiety.

"No answer as yet," said Yama. "If I did not know how efficient our communications are, I would wonder if they failed to hear us."

Ahead of them in the path they could see the brown outlines of the thatched hospital hut. They walked faster.

"You think too well of *Homo sapiens*, Yama. We have never received any word from them, although we know they have preserved some knowledge of science. No, those men would let us die here, and never waste a thought on us. They have no souls."

The messenger waited in the doorway, and they entered the shaded room where a young mother lay on a brushwood cot, pale and despondent. She looked up at them, but did not speak. Beside her lay the body of an infant.

"How long since?" said Dr. Koa.

"It never breathed," she whispered.

Yama beat one clenched fist against his open palm. "Again!" he said. "So few children are born! And so few of them live! Koa, *why* can't we find

some plant which will give us the vitamin necessary for fertility?"

The mother turned her face away, and Dr. Koa shook his head. "I have done my best," he said.

IT was near sunset when the two walked away from the silent hut, and back towards their fields. They stopped to watch the black shadows lengthen over the wheat, and Yama turned to his friend.

"Can't you offer us any hope, Koa? Aren't these new crops any better?"

"Look at them!" said Koa. He waved his hand towards the rows of maturing grains, green and yellow in the soft evening light. "Look at the pale green on the ripening wheat. It will nourish us, certainly, but—And the maize is doing well." He stopped to strip a yellow ear. "Full-kerneled, rich, but I hardly need to point out you how low the vitamin content is, as in all plants grown under this African sun. Those murderers! What is to become of my grandson? And his child, my great-granddaughter?"

Yama sighed. "What is to become of all our future grand-children? You know the answer,—unless those men will help us. And yet, the plants look so healthy!"

"All their virtue is in their appearance," answered Koa. "But try to see inside them for a moment. We will have a good yield of wheat, and an exceptionally large crop of maize and yams, which will provide us with the calories our bodies need, but even the wheat is deficient in the fertility vitamins—the H complex."

Yama glanced across the wheat to the field beyond. "I notice that you have a really excellent stand of Loofa this year."

Koa smiled. "Yes, that should take care of our demand for sponges for some years to come. We shall be able to keep our young clean, at least, but there will be fewer and fewer babies to wash. No, at present I have nothing to report but failure, but I shall not give up trying."

The sun had set and a bright star shone in the east. Yama turned his back on the ripening fields. "Let us go back. Tomorrow the council meets again."

"I shall oppose you to the end, you know."

"It is not me your are opposing," said Yama. "It is the lives of our children."

The colony were assembled in the council glade, and they looked expectantly at Yama.

"Our message has not been answered," he said. "Shall I try again tonight?" He heard some cries of "Yes!", but a few of his audience drummed their feet against the logs they squatted on, and shouted "No!"

Yama paced the low wooden platform. His wise old eyes were set deep under his wrinkled brow, his ears flew from his head like wings, and his beard with its sparse tactile hairs on cheeks and chin was gray. Only the protrusion of his lower jaw distinguished him, in physical appearance, from his chimpanzee forbears who had survived the irradiation of Nagasaki, a thousand years ago. He held

up an arm for silence.

"Have you forgotten, neighbors, how much we need their help?"

"Death is better than dishonor!" shouted old Dr. Koa.

Yama shook his head, "You and I are old, Dr. Koa, and to us death is perhaps not unwelcome. But what did that young mother feel, yesterday? What does your young grandson think? As individuals we are not important, but the survival of our race is. We must try again."

Dr. Koa jumped to his feet. "Why didn't they answer our message? Must we demean ourselves by asking a second time?"

"What other choice have we?" asked Yama. "How many grandchildren do you have, Dr. Koa?"

"One. You know him. Dow."

"And how many children does Dow have?"

"As yet, he has only the one."

"Exactly. Each of us old men is seeing our families die out. You have one grandchild, I have two, but which of our friends has more than two? In the days of our ancestors, we all had large families, but in the last two hundred years they have been growing smaller and smaller. Our people are weaker, and even our young men have not the strength and energy of their great grandfathers."

"That's not our fault!" shouted Dr. Koa.

"I am afraid," said Yama, "that it will do us no good to try to assign the fault to anyone. But we must face the brutal fact that our fertility rate has declined to the danger point,

and our population has reached a number so small that unless we can find a good source of vitamin H, we shall soon become extinct, like the passenger pigeon which once lived in North America, or like the heath hen of New England. The plants of tropical Africa, where we are forced to live, are fatally deficient in the H complex."

An erect figure rose from the audience and advanced to the front. Kraka, the historian, was taller than his companions, and he wore a light cape over his shoulders and across his chest to conceal his greater density of hair, a man-like trait of which he was ashamed. He spoke in a high, precise voice.

"As a historian, I should like to put this matter in its proper perspective. Run-away emotions should have no place in our decision. I am impressed by the fact that in some respects our captive ancestors were more fortunate than we, although we have returned to the Africa from which they were stolen, and we live here by the Congo in a culture they never knew. As a result of the genetic accident that happened to one of them as they cowered in their cages at Nagasaki, we can speak, while they could only howl and emit emotional cries. Also, having acquired a larger neopallium as a result of that mutation, we can direct our motor activities with sustained purpose, as they could not. Most important of all, perhaps, we have gained a concept of time and we are aware of the infinite past—but of our tragically limited

future, too. Our forbears were never faced with a problem of such gravity as the one that confronts is now.

"Whatever our emotional attitude may be toward those men who have flown here from the North Pole, we have the duty of keeping our race alive. We must send another radiogram."

"I'll have no part in parleying with barbarians," said Koa. "They'd probably shoot us on sight, if we ever gave them the chance. What do you expect to gain?"

"The lives of our race," said Yama. "You know that the temperate climates, where our grains might regain their vigor, are hopelessly radioactive, and are barred to us and to *Homo*, alike. Our only hope is that the Polar men may have discovered a way to make the H vitamins synthetically, and that they will teach us their methods."

Dr. Koa stood up. "May I speak?"

At Yama's nod, he ran lightly across the grass, but he had not yet reached the platform when he stopped, and jerked his head up at the sky, then covered his eyes and crouched to the ground.

A blazing light so intense that it dimmed the sun flashed across the sky. A roar like an earthquake beat at their ears, and a few seconds later came the muffled crash of an explosion. The leaves on the trees quivered, the branches rattled. Then there was silence.

Koa got to his feet. "Pan save us!" he whispered. Trembling, he tottered to the platform and raised his hand,

but the audience were shouting and moaning.

"Silence!" he shouted. "The danger is past. That detonation was far away from us!"

The voices subsided to a murmur as he paced back and forth, his long arms clasped behind his back. The African sunlight, no longer made pale by a light greater than itself, glared through the trees to illuminate his gray head.

"After that explosion," he began, his voice hoarse and quivering, "what more do I need to say, even to the most optimistic of you? The men from the Pole are evidently experimenting again with atomic power. Their ancestors waged the Atomic Wars, a thousand years ago, and made barren wastes of three great continents. Only here in Central Africa and in Australia is life still possible. It is obvious that the Polar men are preparing to devastate what land still remains. How can you even consider asking the help of those murderers, even to preserve our species?"

Kraka rose in protest. "Your emotions are speaking, not your mind, Koa. You have no evidence at all for such a conclusion. We already knew that the men have preserved a knowledge of some of the sciences, but without positive evidence I will not believe that they are so insane as to turn loose nuclear radiations in the only place where they can still live. Are we to commit suicide because of crimes devised by their ancestors a thousand years ago?"

"They are their fathers' children!" shouted Koa, but Yama moved forward to calm him.

"We do not know what caused the explosion," he said, "but it is evident that these men are scientists, and we are not. When our own survival is in question, we cannot stop to consider abstract moral issues. If those men know how to make the H complex, we must ask their help. Does a dying child question whose hand gives his aid?"

"Send another message!" someone shouted.

"I shall send a second radio message tonight. If we do not receive an immediate answer, let us send some of our own people to talk to the men, face to face. It is possible, of course, as Dr. Koa has suggested, that they will murder us as they have so often murdered curious animals who wandered into their city, but I am willing to take the chance. It is also possible that they never received our message, for our science is meager, after all. Do you all agree?"

Dr. Koa's "No!" was scarcely audible among the cries of "Yes!"

"Your wishes are clear," said Yama. "We shall try again."

IT was near midnight. In the ceremonial hut Yama rose to his feet, easing his cramped limbs.

"We have waited long enough," he said softly. "They do not answer. I shall leave at dawn. Koa, will you come with me?"

"Never!"

"Kraka?"

"Certainly. At this crisis in our history, it will give me great pleasure to note the order of events."

In the moonlit doorway a lithe young figure appeared.

"Dow!" said his grandfather sternly. "What are you doing here?"

"I should like to visit the Polar men, grandfather. I am curious."

The old man sighed, and turned his back.

ON the eastern shore of Lake Tanganyika lay a gleaming city of tents, nearly five hundred of them, their plastic slopes reflecting the sunlight like a field of mirrors. On a hilltop a few miles from the nearest tent stood Yama and Kraka, dignified in their feathered ceremonial capes, looking towards the lake. Dow glanced at the city, but he was too excited to stand still, and capered about in the trees and bushes. His mouth quirked in perpetual good humor, and his small eyes were alert for every brilliant flower, every strange animal in the forest.

His elders were sober as they stared at the distant city of tents, and looked on to the south where a cluster of factories loomed, and beyond the factories to a broad cleared landing field.

"Let us go on," said Yama. "From now on, Dow, you must try to restrain yourself, and act with the dignity of a father of a child. We must all move quietly."

For the next hour they padded silently down the wooded slopes towards the clearing where the city

lay. Ahead, they could see the edge of the clearing, when Yama held up a warning hand. They stopped, immobile.

A young woman was running from the city into the forest. Her hair streamed behind her shoulders, and she was crying so bitterly that she could not see where she was going, and ran into a tree. She did not stop crying, only changed her direction slightly, and stumbled on. She ran against a second tree and stopped. Brushing her eyes, she made an obvious effort to suppress her sobs, and looked up towards the bits of blue sky that could be seen through the leaves. She shook her fist at the sky, then drew a pistol from the pocket of her dress, and slowly raised it to her forehead.

Without a word, Yama and Dow darted towards her.

"One should never interfere!" called Kraka, but they ignored him and tried to seize the girl.

From the direction of the city they heard shouts and the pounding of feet, but Yama and Dow remained, struggling for the pistol. The girl fought with terrible strength, and suddenly the pistol roared.

A crowd of men burst into the forest.

"The chimps have got her!" shouted one.

"Kill them!"

"Don't shoot, Forrester!" cried an authoritative voice. "She might be hit." A tall man in blue linen shirt and shorts, Captain Junes strode forward, his pistol pointed at the strug-

gling group.

"Good God!" he said. "It's Margot Smith. Major Smith's wife!"

Forrester made a flying tackle at the two animals and dropped them unresisting to the ground, but Captain Junes had a moment's battle before he subdued the hysterical woman who still clutched the pistol.

"But it's my gun!" cried the girl. "I have a right to shoot myself!"

"Shall I polish off these anthropoids, Captain?" said Forrester.

"No. Wait. What's going on here? Did these animals attack you, Margot?"

She shook her head, sobbing.

Kraka had joined the group, and was seized from behind and his arms pinioned.

"If I may explain—" he said in his high, pedantic voice.

The crowd surged forward, but Captain Junes waved them back. "Everybody back to work. Things are under control. What happened, Margot?"

She raised her chin in defiance. "Oh, what's the use of anything? Jim was killed last night in that launching accident . . . We've been married nearly ten years . . . No children . . . There's nothing to live for! I wouldn't want to live on another planet, without Jim, without any children. I thought I'd just get out, without any fuss. Then these two animals jumped me from behind and spoiled my aim."

An elderly man with a cane limped through the crowd and knelt beside her, caressing her hair. "Margot," he

said, "would you have abandoned your father?"

The Captain's face was grave. "I'm glad you've come, MacDougal," he said. "Your daughter needs you. Will you take her to the hospital? See that she's cared for."

"And now, what'll we do with these chimps?"

"If I may explain, Captain," said Yama and Kraka, together, and this time Captain Junes really heard.

"Great Space!" he said.

"We were only trying to protect the young woman," said Yama.

The Captain rubbed his lined forehead, and shook his head. "They talk," he muttered. "I'd heard rumors of talking chimps, but I never believed them. Well, get out of here now and count yourselves lucky to be released. We don't allow animals at our camp."

Yama bowed slightly. "We have come for an answer to our message," he said.

"What message?"

"Our radio message. We sent to you for help."

"I don't know what you're talking about. Now turn around and go back where you came from. I have enough worries—"

A young man ran down the path. "You're wanted at once, Captain Junes. Strelkovinsky is back."

The Captain turned to go, but Yama persisted. "Captain! We have walked some hundreds of miles to see you. Have we earned no right at least to elementary politeness?"

He sighed. "Too many things hap-

pen. I can't seem to think. All right. Forrester, run ahead and say I'll be right along. As for you, follow me, all three of you. It's against regulations, but I made them and for once I'll break them. I'm badgered to death, right now, but if you'll wait in my office. I'll talk with you."

IN the cool air of the Captain's plastane tent, Dow fidgeted, but Yama and Kraka stood quietly near the doorway, and watched Junes as he set at his desk and looked into the anguished face of the yellow-haired giant sitting opposite him.

"But what happened, Steklovinsky? What went wrong this time?"

"Captain, I just don't know. It was just like the others. It got off the ground all right, shot up a few thousand feet, then dived, and exploded."

"And Major Smith with it, I understand."

"And Major Smith with it."

"Next time, if you please, you will come to me directly, and not take on yourself the duty of notifying the next-of-kin before coming to me. Margot Smith tried to kill herself."

The chief engineer raised his head. His clear blue eyes defied the Captain's regard, but his broad shoulders drooped and his mouth was tired.

"If we keep on at this rate," Junes went on, "we'll kill off our population in launching accidents long before they die from lack of vitamins."

"Do you think I enjoy blowing people up?" said Steklovinsky. "Why blame me? I'm doing the best I can, and using the best help that the camp

provides. Why don't you try turning that cold critical gaze on old Doc MacDougal, for a change? You know very well that all he does is putter around in his greenhouse, mooning over his hybrid plants, and sometimes going out for long walks in the forest. He calls it doing research, but at the speed he's going at it, he'll still be doing research on doomsday. And now that Margot's in trouble, he'll spend all his time looking after his daughter, and he probably won't go near his plants. If we only had some decent chemists who could make the stuff, we wouldn't need to be launching space ships and killing people."

"Calm down, Stek. You might just as well say that if there hadn't been any Atomic Wars we could be living a peaceful life in North America. MacDougal is doing all he can, and I'll try to get Margot interested in helping him. It will give her an interest in life. Of course it would have been better if Polar Station had had a chemical unit, or even a combined physics and chemistry unit, and if the Wars hadn't started so soon, they would have had all the sciences represented there. At least we started with a fairly well-stocked library. And if we're going to be forced to leave the earth, be thankful that we've preserved a knowledge of nuclear physics, and have been able to extend it."

"There are days," said Stek, "when I wish we'd lost that too."

"Excuse me," said Yama.

"Don't interrupt us," said Captain Junes. "I'll tend to you later."

"Holy hydrogen!" said Steklovinsky.

sky. "Talking chimps! The world is going crazy. Maybe we'd better leave, and head for the nearest planet as fast as possible. Or go back to the Polar regions. Life can't have been so bad there."

"Our great-grandfathers would not have agreed with you. Life at Polar Station was pretty rugged. That's why they migrated to Africa, remember."

"It might still be preferable to the cold deserts of Mars. I'm tired of struggling against the inevitable. We want to migrate to another planet, we ought to be able to, we've apparently got what it takes, but most of our ships crash on trial. Why not just give up?"

Captain Junes spoke sharply. "No more of that, Stek. We don't give up until we're forced to. But if you don't do better on the next trials, we won't have any choice. Don't you realize that in the two hundred years since our people came here from the Pole, the population has declined to half? There aren't many more than two thousand of us left. No, Stek, we're on a spot. You must keep trying. I'm afraid that if we don't manage a successful launching this year, we never will, for we're not really making any progress."

"Perhaps we could help you?" said Yama.

They ignored him.

"Well," said Steklovinsky, with a grin. "shall we give up trying for heaven, and take off for Australia?"

"And be blasted out of the sky as we approach? No, Stek, there's no

question that they mean it when they say that they're already overcrowded and won't take in any more immigrants. Our problem just isn't that easy. We can stay here until the race dies out, or else we can launch that ship and head for the stars. Haven't any of your boys got any ideas as to what goes wrong?"

He shook his head. "We've been over our computations a million times."

"Just the same, let's go over the blueprints again."

Yama coughed. "May we offer our assistance?" he said. Both men turned to look at him.

"You're becoming a nuisance," said Junes, "but I suppose I might as well listen to you and get rid of you. What do you want?"

"We have come for an answer to our messages," he said. "Since you did not reply, either time, we have come ourselves to see you. But from your reception of us I judge that we are not welcome, and that you did not wish to reply. No doubt we have committed a breach of your customs in coming here, but must we be treated like criminals?"

"But we don't allow animals here! Our people are afraid of them, and you are probably in actual danger of attack when you leave here. Ordinarily you wouldn't have gotten a hundred yards out of the forest before being stopped. Under the special circumstances of your arrival, because you saved Mrs. Smith's life, you managed to get here alive. Where do you come from? What do you want?"

"First, why did you not answer our message?"

"What message? We never heard a word from you."

"We have radioed you, twice, asking for help. But we know very little science, and are probably lacking in skill."

"But who are you?"

"I am Yama," he said. "I have spent my life in the study of the stars, but now that I am an old man I am merely the leader of my people. This young man is Dow, and beside me is Kraka, one of the few who has preserved a history of our colony."

"But how do you happen to speak English?"

"We come from the Congo Station," said Kraka, breaking in. "We were sent there just before the Atomic Wars, about the time your people were settled at the Polar Station. When one of our remote ancestors was mutated by the irradiation of Nagasaki, his children inherited his altered genes, and they learned the language of the people who occupied the country at that time,—Americans. And so it became our language. The Congo Station was arranged so hastily in the few days before the War broke out, that the only scientists who were able to reach safety there were ten physiologists who had taken our people with them for study. The wives of these men never arrived, because of the War, and after the men died, we chimpanzees have tried to preserve the colony."

"But why have you come here?"

"We have come for help. Our race

is dying for lack of the fertility vitamins, the H complex. We are not scientists. We know a little physiology, that is all, but we knew that you men from the Pole have preserved other sciences, and we hoped that you could teach us to synthesize the vitamin."

"We can't help you," said Junes.

Yama sighed. "Dr. Koa warned us that you would refuse."

Junes' laugh had a bitter sound. "I didn't say we *won't* help you. I said we can't. We don't know how to synthesize the vitamin. We wish we did. Our race is dying, too. We're in exactly the same situation you are. You heard that woman this morning. She's one of hundreds."

"And yet," said Yama, "you haven't given up hope."

"Hope dies hard. We're going to migrate to another planet, and try to find climates capable of growing the plants which produce the H complex."

"You mean that's what we'd like to do," said Steklovinsky. "So far, we haven't got very far off the earth."

"That's right. But we're going to keep trying as long as a single man of us is left."

"I had never thought of that!" Yama whispered, his old eyes glowing. "We could migrate to the stars! It is our only hope. Explain your difficulties, Captain. If we worked in cooperation, we might succeed in preserving both our races."

"A chimp offers to cooperate!" said Steklovinsky. "I'd try Australia before I'd parley with a chimp."

Yama looked up at the broad shoulders and short yellow hair. "We share a common feeling, young man," he said. "Only the most extreme necessity compels us to consult with members of a species who are responsible for making three-quarters of the earth too dangerous to live in."

"Mind your manners, Stek," said Captain Junes wearily. "No doubt you mean well, Yama, but we can't take you with us, and you can't help us. If the only science you people know is physiology, you'd be of no use whatever in launching a space-ship."

"Are you sure?"

"If we were able to locate a plant which produced the H vitamins, I would have no objection to telling you, but MacDougal regards the job as hopeless. I suggest that you return to your home in the Congo, live as you always have, and forget all about us."

"Africa is the original home of the chimps," said Steklovinsky, "If it was good enough for your ancestors, why isn't it good enough for you?"

Kraka stared at him curiously. "Does every community have one like you, I wonder? You are almost as vindictive as Dr. Koa!"

"Then hurray for Dr. Koa," said Steklovinsky. "All this talk isn't getting us anywhere, and we have enough worries without adding yours to ours. Keep on palavering as long as you like, but I'm going to think above space-ships for a while." He leaned back in his chair and closed his eyes. Yama meditated on the

tired-looking face. Then he, too, relaxed and closed his eyes.

The room was silent. Captain Junes picked up a pencil from his desk and twirled it between his hands.

Young Dow watched the pencil, fascinated by the rapid motion. Suddenly, for the first time, he spoke.

"Teach me to pilot the ship. Then it wouldn't crash." Then he looked at the floor, shy before the eyes turned on him.

Junes snapped the pencil and threw the pieces onto his desk. He stood up. "We're wasting time. I don't understand you creatures. First you say you sent us a radio message, which we never got. Then you say you haven't any scientists. Then you offer to help us launch a space-ship. It doesn't make sense. We still have all the man-power we need, and unless you have some nuclear physicists or space engineers, you have nothing to offer that's any good to us. And even when we do manage a successful launching, the most we can hope to do is to take off all our own people who are under the age limit we've set. There wouldn't be room for you, and even if there were, most of our colony would object on general principles to taking along a cargo of animals."

Yama blinked, opened his eyes, and leaned forward. "But you don't seem to realize that without us you will never succeed!" Junes laughed, but Yama persisted. "You haven't even decided, yet, which planet would be the best one to aim for."

"I suppose you can tell us?"

"Of course. It puzzles me that you should still be hesitating, when Venus is so obviously the right one. Underneath her dust clouds there are large areas of temperate climate where wheat and other plants could grow to supply the H complex in high concentration."

"How do you know that?" said Junes. "From your years of gazing at the stars?"

"But it is obvious! How do you not know it?"

"I never had any faith in astrology. Anyway, you won't get the chance to check up on your theory. We can't take you."

Steklovinsky was frowning and muttering to himself. "There's nothing wrong with our theory . . . The computations check . . . Ships ought to work . . . But they just don't. Something about the design ought to be changed. What? Where? And the crews never live to tell us."

"Your ships are all right," said Yama. "Your problem is simply a matter of physiology."

"Holy hydrogen!" said Steklovinsky. "What does physiology have to do with driving a space-ship?"

"It is evident that that particular science was not represented at Polar Station," said Yama. "I suggest that we make a trial. On the next launching, let young Dow here be one of the people in the control room. I cannot be positive, but I don't think your ship will crash."

Steklovinsky's lip curled, and he looked at Dow with contempt. "What can a chimp do that our men can't?"

"He could pilot your ship, Mr. Stek, once you have taught him how."

"But how do you know that will make any difference?" asked Junes.

"Oh, you almost make me lose my patience! How do I know the sun is shining, or the wind blowing? It is obvious. Does it matter *how* I know? The structure of our bodies is somewhat different from yours, I should remind you. One of our ancestors, after all, was mutated at Nagasaki. Yours weren't. You apparently know amazingly little of the workings of the human body. Why not make the trial?"

Steklovinsky shrugged his shoulders, and Junes raised an inquisitive eyebrow at his chief engineer. "Drowning men clutch at straws," he said. "What have we got to lose? When did you plan to make your next trial, Stek?"

"It will take at least a couple of months to get ready."

"Well, I think we might make a deal. As things are, we're stopped cold, and I'm inclined to grab at any possibility of help."

Turning to his visitors, he spoke briskly. "All right, Yama, we'll try a cooperative project. If you—what shall I call you? We would call you chimps, but in our colony the word is not used as a respectful one."

Yama's eyes crinkled. "With us, also, 'men' is a term of ridicule and disrespect. I suggest that you call us what we call ourselves: the People."

"All right. If you People want to cooperate, we'll let Dow learn the technic and be co-pilot on the next

trial. If the trip is successful, we will agree finally to take you with us to Mars or Jupiter, or wherever we decide to go."

"Venus," said Yama.

The two old People fastened their feather capes about their shoulders. "We shall explain matters to your grandfather and your wife, Dow. And before two weeks are gone, we shall return."

FROM the forest glade of Congo Station, Dr. Koa advanced to meet the travelers.

"I should never have let Dow go with you," he cried. "I am oppressed, day and night, with the shame, that my own grandson has become a traitor to his race."

Yama patted him gently on the shoulder. "You look at the wrong end of the stick, old friend. Only by offering his help could we hope to save our People. You call it treason. We call it cooperation."

Dr. Koa shook his stubborn head, as he walked beside them. "Well, at any rate, I see you got back alive. I'm surprised that the men didn't shoot you in the back as you left. What do you think you accomplished?"

"I explained that to you in my message, Koa. They don't know much organic chemistry, and they can't make the H vitamins. That hope is dead. The only chance for either race is migration to Venus."

The old man shuddered.

"Are the other young men ready to go?" asked Yama. "They can learn the technics too, and will be very

helpful to the men."

"Yes. There are fifteen of them, ready and waiting. You can all leave in the morning. But this is a terrible thing you are doing to us, Yama, taking my grandson and our finest youths away from us."

"Then come back with us! Whatever their ancestors may have been, these men are not incurably evil. They are rough, and as prejudiced as you are. But they have a rude sense of justice, and are certainly not so blind to their own welfare as you are. Come back with us, and you can look at these specimens of *Homo sapiens* for yourself."

"Never! Men devastated the earth, and now their descendants are robbing us of our children."

"They have an expert who grows plants, just as you do," said Yama persuasively. "You might learn something from him."

The old man was silent, and Yama's voice softened. "We share your feelings, Koa. None of us wants to lose our young people, and none of us wants to abandon our heritage, the earth. But we must. Now, go call the young men together."

At dawn, the fifteen young people said goodbye to their families and, led by Yama, loped silently along the forest path towards the reddening east. Before it was noon, they stopped to eat and to sleep for a while. Yama woke suddenly at the touch of a hand on his forehead.

He opened his eyes to see the melancholy face of Dr. Koa bending over him.

"I shall go along with you," he said. "Tell me again. Was Dow looking well when you left him?"

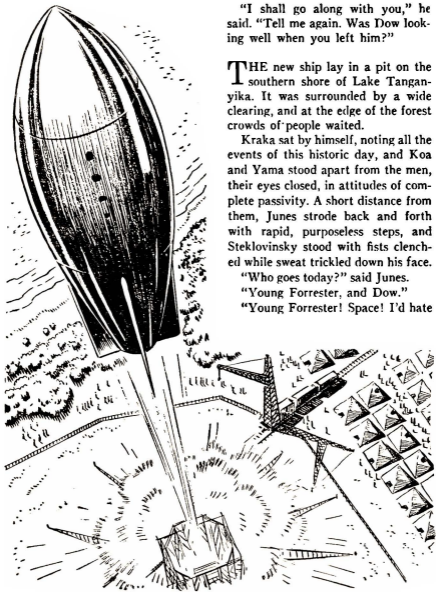
THE new ship lay in a pit on the southern shore of Lake Tanganyika. It was surrounded by a wide clearing, and at the edge of the forest crowds of people waited.

Kraka sat by himself, noting all the events of this historic day, and Koa and Yama stood apart from the men, their eyes closed, in attitudes of complete passivity. A short distance from them, Junes strode back and forth with rapid, purposeless steps, and Steklovinsky stood with fists clenched while sweat trickled down his face.

"Who goes today?" said Junes.

"Young Forrester, and Dow."

"Young Forrester! Space! I'd hate



to loose him."

He strode over to Yama. "If the ship crashes, Yama, you'd better streak for the trees. I won't lay the blame on you, but I may not be able to control my people. They don't trust you."

"I don't think the ship will crash."

Koa would not look at the Captain, but he spoke. "If the ship crashes, with my grandson aboard, I shall hold you responsible. Look out for yourself."

Junes paced away, and peered nervously at the field.

"They seem to take so long! What are our chances, Stek?"

"The same as before."

"No, Mr. Stek," said Yama. "They are much better. Our young Dow, remember, is co-pilot today."

From the lake's shore came a sharp detonation. A flash, a roar, and the ship rose, her gleaming nose pointed straight up to the sky. Up, up, and out of sight.

They held their breaths, still as statues, as the seconds passed. Then Steklovinsky yelled and leaped into the air. "She's still up! She's still going! She hasn't crashed yet!"

Old Koa sank to the ground and rested his forehead on his knees. Yama smiled and touched his shoulder.

"They're safe," he said.

SIX hours later the ship returned and slid gently into her berth. When the space-port opened, the gangplank fell into place and a white-faced Forrester staggered out, while

Dow ran easily behind him, a wide grin on his impish face. Forrester fell to the ground, and Junes knelt beside him.

"Stek, get a stretcher! What happened, Forrester? How did you manage? It was a great flight, boy. Tell us."

Forrester did not open his eyes. "I don't know what happened," he muttered. "Ask Dow. I blacked out."

"Blacked out? Then how could you control the ship?"

"Didn't. I was out. Ask Dow."

"Take Forrester to the hospital," said Junes. After the stretcher had gone, he looked around. Dow and his grandfather were close in conversation, and Yama stepped forward.

"Let me explain," he said. "It is really very simple, just as I thought. Your failures before this have been caused by the physical peculiarities of your men. The little I know about the conditions of a space-lift I have learned from you, of course, but it is clear that the initial acceleration which is needed to lift the ship off the earth is enormous, in the neighborhood of ten G, and the strain was too great for your men to stand. Under such stress, they fainted, lost control of the ship, and with no one to man the jets the ship of course could not escape the atmosphere, and it crashed."

"But we know all about the stress and strain of gravity," said Captain Junes. "And by our calculations it ought not to be too much."

"For us, and for a few of your own colony, it would not be too much. You

understand gravity, but you don't understand the inheritance of physical types. Purely by chance, most of your people have inherited from their ancestors at the Polar Station a type of body physique which is not equipped to sustain the demands of space conditions without damage. They are of the wrong somatotype."

"But Dow did not lose consciousness!"

"No, Dow has inherited a different type of physique. Remember, my people are a mutated stock. We are smaller in size than you, lighter in weight for our height, and our nervous systems have a slightly different organization. The acceleration is uncomfortable for us, but it is bearable. We don't black out under the strain. With one of our people at the controls, your ships will never crash."

"Do you mean to stand there and tell me," shouted Steklovinsky, "that you've tricked us into launching ships so you *People* can get off the earth, and leave us behind? Never trust a chimp!" He clenched his fist and lunged forward, but Junes stopped him.

Yama remained calm. "Do not lose your self-control," he said. "I am sick of this mistrust. You saw that Forrester was not injured, only tired. If the ship had continued on its way, he would have recovered consciousness after it reached full speed, none the worse for wear. Some of your other men, on previous trials, have not been killed by the journey itself, but by the crash and explosion after

they blacked out."

"Some of them?" asked Junes. "What do you mean by that?"

Yama went on in his mild voice. "We can pilot the ships for you, and most of you can travel in them in perfect safety."

"Are you trying to drive us mad?" said Junes. "Stop being so mysterious. What do you mean by some of us, and most of us?"

"Is it possible that you do not realize, even yet? Do you not know how human bodies vary in innate stamina? You surely know, for instance, that your old people cannot stand the shock of a journey into space. Their hearts would stop. Kraka and I from the beginning have been resigned to the fact that when the trip is made, we cannot go. Our bodies are too old. We must remain behind."

"Of course I know that," said Junes. "Our colony has long ago agreed that everybody past fifty will have to stay behind. None of us are happy about the arrangement. In fact it's stark tragedy, but everyone has accepted it, knowing that their children will have a chance to carry on the race."

Yama's response was scarcely audible. "It is very sad. But the situation is worse than you think. Not all, even of the young, can go safely. Some can stand the acceleration with only a fainting spell. But there are some who would die."

Junes stared at him in horror. "Then we haven't solved anything! We'd resigned ourselves to leaving

the old behind, but now you tell us that some of the young are not fit to go! Our families will be broken up, separated forever! Then what have we gained?" He whirled to face the gleaming ship, quiet in her berth, and his shoulders sagged in despair.

DEPARTURE was only two weeks away. The rows of tents were quiet, a city of the dead, peopled by somber figures as morose and silent as ghosts. People got ready for the migration as though they were preparing for a mass funeral.

Many tents already wore black streamers, drooping from their roofs, and every day, as other families learned that one or more of their members had been refused the health certificate which he must show before his name could be added to the passenger list, the black flags multiplied.

Far to the south seven giant ships were nearly completed, ready for the great exodus. Most of the People from Congo Station had arrived at Tanganyika, and chimpanzees and men worked together at readying the ships, but they found no joy in their labors. Not more than a hundred inhabitants were left at Congo Station,—old people who could neither make the space journey, nor face the grief of saying goodbye to their young ones.

Near Captain Junes' tent the crucial testing station was set up to produce a small replica of the acceleration and gravity forces to be encountered in space. Each day lines of human beings entered, submitted

to the excruciating tests, and merged pale and trembling, some of them weeping, but some full of happiness at the news that they were space-worthy.

Kraka was visiting his human friends for the last time before they left the earth. He sat in Captain Junes' office, asking questions of him and Steklovinsky, taking notes on the procedures, and requesting every item which ought to be included in his history.

"It seems futile for you to be working so hard at your history," said Junes.

Kraka smiled serenely. "You mean, because in a few years there will be no one on earth to read it, or to care about it? There may not be. But that does not affect my pleasure in keeping the record. The joy of scholarship is in the work itself. When I die, I will die content, knowing that I have not slighted my work, even on account of a tragedy such as this."

"You have my respect," said Captain Junes. "I only wish you could be going with us."

"My old heart would never stand the trip, I fear."

"Is there anything else you want to ask me? Any data we've forgotten?"

"No, I think not. Wait! A small point, but I should not like to leave the question unanswered. What has become of the young woman who tried to kill herself on the day we first came here?"

"Margot Smith?"

"I can tell you," broke in Steklovinsky, grinning. "She is quite all right now. I've been looking after her, and the fact is, we're going to be married, and begin our new family on Venus. She passed the space-test last week, and just last night she agreed to marry me."

"I am happy to know that," said Kraka.

"Congratulations, Stek," said Junes. "And on passing your own test, too. You hadn't mentioned it."

"Me? Oh, anybody can see at a glance what a big husky guy I am. I imagine I can stand ten G better than most of you. Good luck, Kraka!" He offered his big hand to the historian, and strutted out the door.

Dr. Koa walked in, slowly. "I have said goodbye to my grandson," he said. "Now I should like to go home with you, Kraka. I have nothing to live for."

Captain Junes stood up and extended his hand, which Koa accepted with distaste.

"I wish you thought better of us, Koa. Surely you will admit that ours has been a successful collaboration?"

His old eyes flashed. "I am proud that I, at least, never cooperated! You men have a strange idea of success. To have our families broken, our people separated. To be forced to leave their homes here on earth and go to live on an alien planet, and turn their backs forever on their heritage!"

"But isn't it success, to preserve the race?"

"It is necessary, I suppose. But it

is not success. There is no good solution. I shall return now to look after my plants, and forget the smell of men."

Captain Junes turned red. "I regret that you still hold us in such contempt, but I will not attempt to change your mind. Before you go, though, wouldn't you like to see some of our own work on plants? You've always refused to meet MacDougal or to go near his greenhouse, but he might have something to show you."

Koa hesitated. "I suppose there's no harm in looking. A day's delay cannot matter, compared to the years of solitude ahead of me."

Junes pushed the button on his call-box. "Dr. MacDougal to my office."

The elderly man limped in with the aid of his cane, and glared from under his shaggy eyebrows at the visitors.

"I'd counted on being left alone for the rest of my life," he said. "You know how much I dislike being interrupted at my work."

Junes' manner was gentle. "I know, MacDougal. But two weeks from now there will be few people to interrupt you. Meanwhile, an hour or so can't matter. Here is Dr. Koa, who would like to see your herbarium. He, too, has spent his life in looking for new sources of vitamin H."

"The fertility vitamins!" growled Koa.

"Whatever you call it, we've both wasted our lives," said MacDougal. "Come along."

He led the way to his greenhouse,

and they strolled among the rows of potted plants.

"So we're to be driven from the earth," said MacDougal, "because the ground has stopped producing what we need. Because of the crimes of our ancestors, the very earth disowns us. My son-in-law was killed in a launching accident, my only daughter is going to marry again and leave me. Well, I'm glad I'm too old to go. I wouldn't like the change. What do you think of my plants?"

"I, too, shall stay with the earth," said Koa. "It is my heritage. But I shall miss my grandson. I wish I had had the knowledge, when I was young, to grow plants like these, artificially."

"With proper knowledge, and a chemist's training, I might have synthesized the vitamins instead of trying to grow them. You and I, Koa, are old, blind men, groping in the dark with blunted fingers, and our time is running out. And yet, to find what we were looking for, all I'd have had to do, probably, would be to link together a couple of benzene rings with a side-chain a yard long, to produce the true H complex. But I don't know how. What's the matter?"

Koa had paused in his walk. "Your words are strange to me. I'm just trying to see the picture." They went on, and before one cluster of green leaves Koa began to laugh.

"What are you laughing at?"

"This plant here, in this pot. Why are you growing it so carefully? We grow it by the acre at Congo Station, and make sponges out of it. Why

does it interest you?"

"The *Luffa utilans*? I know it's common here in Africa, but I have no particular reason for growing it except that it is an interesting specimen. Here are my real prizes." He pointed to a plant with small, broad green leaves, lightly veined with yellow. "What do you think of my *cucumis chito*? It produces one of our favorite fruits."

Koa bent over, stared, and closed his eyes.

LATE in the afternoon, as Yama and Kraka were resting in Captain Junes' office, the door opened slowly and Steklovinsky staggered in, supported by the slender arms of Margot Smith. His face was white and haggard, and he slumped into a chair without a word. Pale in her black dress, Margot addressed the Captain resolutely.

"Captain Junes, please remove my name from the passenger list."

"Great Space, Margot, what's happened? Have you been in an accident, Stek?"

He tried to laugh, but failed, and his voice croaked with fatigue. "Yes. An accident. I flunked my test."

"But I thought you'd passed it weeks ago!"

"No. Just got around to it today. A big fellow like me, and can't pass the test! They say I'd die on the way. And a little slip of a thing like Margot will get through all right. They say I'm the wrong somatotype."

Junes bowed his head, and bit his lip.

"If he stays here, I stay too," said Margot.

"Not on your life," said Steklovinsky. "Just because I'm no good is no reason you have to be tied to the earth. You go on, marry some better man, and have a big family."

She still looked at the Captain. "Take my name off the passenger list, please!"

"Stop! I can't think! How can we get along without you. Stek? Are you sure they didn't make a mistake?"

"No. No mistake. I can't take it. Guys of my somatotype don't leave the earth.—and live."

All three were gloomily silent. Then Margot began to cry, hopelessly.

Yama rose from his place in the corner and spoke sadly.

"I am sorry for you. Stek. At least, you have made it possible for the others to reach the stars. I should like to go now, for a few hours. If you will excuse me, Captain Junes, I shall retire to the forest and send a message back to Congo Station, telling them of the final preparations, and relaying the final goodbyes of their children. They will be waiting to hear from me."

Junes came out of his abstraction. "You mean to say you People lugged a radio sending set all the way with you from the Congo?"

Yama looked puzzled, and then smiled. "I suppose you are making a joke," he said. "It is hard for me to remember that men like to joke, just as we do. Yes, you may say that I carried it with me all the way from

the Congo. How could I leave it behind?"

"I don't understand you," said Junes.

"I don't understand you, either. But I can see what you must be thinking. A small box? With a peculiar arrangement of metal wires? What a strange way to send a message!"

"Evidently your radio is a very different model from ours."

"Model? I feel as if we had suddenly stopped speaking the same language. We use our radio to send messages to those of our People who do not live near us, and to receive word from them. We have always used it in the same way, at any rate for a thousand years, in the way our ancestors from Nagasaki taught us."

"I wish I could see it."

"Certainly! Although this is hardly the best situation in which to work it. We usually prefer the forest, or our ceremonial hut. Kraka, will you join me?"

They retired to a corner of the tent and squatted on their haunches. They placed their finger-tips together, covered their eyes with the finger canopy, and bent towards each other until their foreheads touched. They closed their eyes and became quiet.

After a long silence they rose and turned to Captain Junes. "We have told our People what is happening here, and they have answered that they are happy for their children, but sad that they must be separated from them forever."

"Was that the kind of a radio mes-

sage you sent me?" asked Junes.

"Of course."

"No wonder we never got it! We can't read thoughts. You People are sending thought messages!"

"Are we? We have always supposed it was radio. That is what our ancestors called it. We know so little science, of course. but the knowledge of how to send and receive messages is one thing we have been proud of keeping."

The door swung open and MacDougal rushed in.

"Junes! Junes!" He dragged at a reluctant Koa, behind him.

"Junes, we've made a tremendous discovery! Koa and I together, in my lab. I was showing him my plants. He *sees* things. Junes, we've found it!"

"Found what?"

"The H complex! The fertility vitamins! The works! I don't know how he does it, Captain, but he *sees into* things. I mentioned vaguely what the organic formula for the H complex would have to be like, and he understood at once. Suddenly he said that if we'd take the loofa plant it could supply the tocoquinone group, which he could *see* there, in its structure—"

Junes slowly rose, his eyes wide, staring at Yama. "Is that the way you 'saw' that Venus was the best planet for us to go to?"

"Of course," said Yama. "Doesn't everybody see things that way?"

"Is that the way you absorbed a thorough knowledge of space mechanics in about five minutes' time?"

"Certainly. That first day when we met Mr. Stek, when he withdrew from the conversation, his mind showed us his problems in launching the ship."

"Clairvoyance!" Junes whispered. "If we'd only known! We knew a little chemistry, but no more. We weren't at Nagasaki. We aren't clairvoyant."

Young Forrester burst in at the door. "Well, Captain! I'm feeling chipper again, and ready to take on all Space with one hand. When does the great migration take place?"

The Captain spoke with deliberation. "It won't take place, Forrester."

Margot's face was radiant. "Does this mean we can all stay on the earth?"

"Yes. Even Dr. Koa will have to admit that *this* collaboration was successful. Our amateur knowledge of chemistry, and Koa's clairvoyant mind, have joined forces. Thank God it's not too late. Together, we can make our vitamins for ourselves, and both our races can remain on the earth."

"We may still want to explore the universe," said Yama. "It will be a glorious achievement when our two peoples, working together, visit the stars. But not to stay. After a visit, it is always good to be able to come home."

THE END