



MARCH 1950

Trade	Mark	Re	gis!er	ed	U.	S.
Patent	Offic	ce	Ν̈́ο.	3	784	07

All Features Complete

	5.
WILLIAM B. ZIFF	
Chairman of the Board	100
and Publisher	3
B. G. DAVIS	
President	
Vice-Presidents:	-
MICHAEL H. FROELICH	
Dir. Eastern Division	
H. J. MORGANROTH	
Production Director	
H. G. STRONG	
Circulation Director	
Secretary-Treasurer A. T. PULLEN	
Art Director	
HERMAN R. BOLLIN	
E ditor	
HOWARD BROWNE	
Managing Editor	
WILLIAM L. HAMLING	2
Associate Editor	
LILA SHAFFER	
Art Editor	
BRAD PENDLETON	
	1.



Published monthly by AINT-DAVIS PUBLISHING COMPANY at 185 North Wabash Ave., Chicago 1, 10. New York Office, Empire State Building, New York 3, N. Y. Entered as second class matter June 3, 1947, at the Post Office, Chicago, Illinois, under the Act of March 2, 1879. Additional second class entry, Holyoke, Massachusetts. Subscription: in U. S., Canada, Mexico, South and Central America and U. S. Possessions \$2,50 for 12 Issues, all other Greign countries \$3,50 for 12 issues. Subscribers should allow at least two weeks for change of address. All communications about subscriptions should be addressed to the Director of Chicalation. Ziff-Davis Publishing Company, 185 North Wabash Ave., Chicago 1, 11L

VOLUME 24 NUMBER 3

All STORIES Complete ____

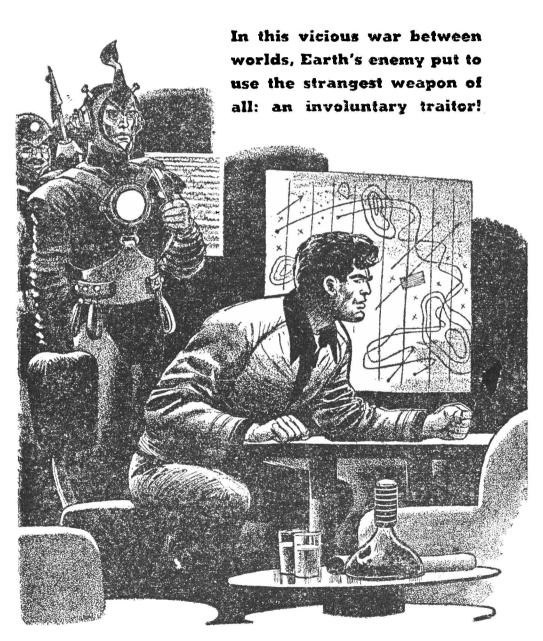
THE ULTIMATE PERIL (Short Novel-27,000) Illustrated by Rod Ruth	by Robert Abernathy 8
The Earth faced destruction because of one man - and	he didn't know he was responsible! ,
THE MAN FROM ARBUTUS (Short—6,800) Illustrated by Julian S. Krupa	by H. B. Hickey 58
The frontiers of space were no challenge to Magruder -	but on Earth he faced grave danger
ALL ELSE IS "UST (Novelette—10,900) Illustrated by Rod Ruth	by E. K. Jarvis 72
Everyone expects a dead man to eventually turn to dust	t — but here it happened to the living!
FOR EACH MAN KILLS (Novelette—10,000)	by William F. Temple 92
Jealousy can play strange tricks on a man — such as	hating a rival that nover really existed!
YOU ONLY LIVE TWICE (Short—5,000)	by H. B. Hickey
Dick Enson wasn't afraid of death — for in his case, dy	ying meant a long life of happiness
SWORD OF PEACE (Novelette—10,000)	by Ward Moore124
A voice echood throughout the world preaching peace	- but at a great cost to mankind
TWO AGAINST VENUS (Novelette—20,000)	by Craig Browning144
They are all a Viene for the item of life and in	as Mad abote our badter badest a

Front cover painting by Robert Gibson Jones, Illustrating a scene from "The Ultimate Peril,"

Copyright, 1950, ZIFF-DAVIS PUBLISHING COMPANY
Member of the Audit Bureau of Circulations
We do not accept responsibility for the return of unsolicited manuscripts or artwork. To facilitate handling, the author should encircle a self addressed envelope with the requisite postage attached, and artists should c. lose or forward return postage. Accepted material is subject to whatever revision is necessary to meet requirements. Payment covers all authors', contributors' and contestants' magazine rights in the U.S.A. and all other countries in the article and—or illustrations and for publicity and promotion in connection therewith and will be made at our current rates upon acceptance. All photos and drawings will be considered as part of material purchased. The names of all characters that even used in short stories, socials and semi-fiction articles that deal with types are fictitious. Use of a name that is the same as that of any living person is coincidental.

THE ULTIMATE PERIL

By Robert Abernathy





She sat staring straight at him, and yet her eyes seemed to see something else . . .

HE Sheneb was five thousand tons, built in Venusian yards as a copy, line for line, of an Earth cargo carrier. As such she had served her first few years, driving crewless between Venus and its colonies on the outer worlds.

Now she was converted. Lusterless black, absorbent not only to light but

also to far longer wave lengths, hid her magnesium skin, and an atomic blast gun peered threateningly from an airless swivel turret built clumsily into her once clean-cut nose. That was for war.

For her present purpose there were other changes. The cargo decks had been stripped of all equipment and sealed off by partitions from the engine and control rooms forward. That was to protect the Venusian crew from the poisonous oxygen breathed by the prisoners in the hold.

After thirty hours in space, twenty-six under zero acceleration, the cargo decks were uninhabitable. But men, women and children still clung to life there, a tangle of bodies helplessly adrift in the fetid air. The Venusians had provided little ventilation, no light, and no waste disposal mechanism, which last was a peculiar horror in the weightlessness.

But perhaps worst of all was the darkness. It denied them the little comfort of seeing other human faces in their hell. And in the darkness no one could count the living and the dead. And if, floating in that black pit, you bumped against a rigid body. it was not worth the effort to find out whether the stiffness was that of death or the cramped rigidity of space sickness-not the nausea that had wrenched most of the prisoners in the first hours, but the other space sickness that was worse-zero free-fall hysteria, neurosis. names there are for the primitive terror of falling, falling endlessly into blackness for more than an Earth day now. Very few knew how to take that sensation; many gasped and fought for a support that was not there and lapsed at last into a paralysis of fear.

Not long after acceleration had ceased, the word was passed round that Favreau, Ambassador of All the Nations, was dead. That might mean something in interplanetary politics—but here he was only one of many dead.

A woman's voice, a girl's by the sound of it, was sobbing and talking through sobs, trying to rouse someone named Jim—and failing.

Another voice interrupted her,

speaking almost in Ralph Degnan's ear: "Better let him be. If it's zero neurosis, he may be luckier than we are." Degnan recognized the voice as that of the doctor who had tried to calm and help during those first hours of darkness and crushing acceleration and terror. The doctor went on, explaining quietly, as if he were in the clinic, "In that condition blood is drawn away from the brain. It helps combat the derangement of blood pressure in free fall, that may bring on cerebral hemorrhage. Zero neurosis may be a survival mechanism."

"Survival?" The girl-voice caught up the word, and laughed with a surprising, bitter energy. "I've been praying for the deflectors to fail when a meteor comes in our path."

The conversation, so close and yet invisible, irritated Ralph Degnan's raw nerves in ways he didn't stop to analyze. He said savagely, "If you've got to pray, who don't you make it for an Earth warship? And dammit, doc—you don't have to be scared, to live in free fall."

IN THE silence, Degnan could hear unhurried breathing close beside him. He sensed that the doctor was trying to see him, studying the tones of his voice.

Finally, the steady voice said, "Perhaps you're not afraid, my friend. I'm sure I am, both of now and when I try to imagine life in a prison on Neptune... But I think you're upheld by another emotion that has much the same physiological effects as fear. Anger, or hate."

"I'm waiting," said Degnan flatly. "The Venusians never make a mistake—they think. They and their 'total mentality'. I'm waiting."

"There's no chance here."

"Maybe on Neptune, if that is where they're taking us."

The girl's voice came out of the

blackness, sounding frightened, uncertain. "Who are you? I don't think you're one of us."

"Who's 'us'?"

"Most of the people here," explained the doctor, "are from the colony at Ghrup Shiyap. Attached to the embassy there, as I was. Even when we heard—we hoped we'd have some diplomatic immunity. Maybe we do—they haven't killed us outright."

"I was a clerk in the embassy. I got the job to be with Jim—my brother." The girl's voice shivered. "There wasn't any warning. Only a radio flash—and then they came for us—"

"I believe," said the doctor soberly, "that all the Earth people on Venus were rounded up within an hour of the first news of fighting. The Over Race is efficient."

"They were even more efficient in my case." The others couldn't see Degnan's twisted grin. "They put the finger on me two weeks ago. I didn't know the war had begun until they shoved me on board this ship."

"We don't know much more. It was reported that a Venusian cruiser fired at installations on the Moon, that Callisto was bombarded by Earth ships. No major engagements."

"There will be," said Degnan with grim confidence. "After what they've done, Venus is at war with every country on Earth. That makes the odds in first-class battleships alone better than thirty to their one—and in manpower, if you can call theirs that, still better. We'll smash them."

"I hope you're right," said the doctor, a queer doubtful note in his voice.

The girl asked hesitantly, "Where were you? Before they arrested you, I mean."

"In the Gray Barrens near Ghrup Unur," said Degnan. "Trading with the Under Race... Those are Venusians a man can deal with. Their minds work like ours."

The doctor remarked unemotionally, "Our captors would say that's because we're savages, too."

DEGNAN said nothing. His hatred of the Venusian Over Race was too deep and too precious to waste in words. But the stifled sound that did escape him must have been expressive, for the girl spoke in a new voice, rich with pity: "They must have hurt you terribly. I don't see how anybody could live through two weeks of being their prisoner."

It was like running into something sharp and hard in the enfolding blackness. It jarred the fierce intent anger out of him and left him feeling hollow and weak.

He said shakily, "I don't know. I don't remember what they did to me." His eyes stared into the darkness until he saw points and darts of light that weren't there.

"What's the matter?" inquired the doctor's even voice.

"Twelve days," muttered Degnan hoarsely. "I'm sure of that, anyway. That long between the time they grabbed me and when they put me aboard... But I don't know what happened in those twelve days."

"That's not unusual, you know. Frequently the mind rejects a memory that's too painful."

Degnan didn't answer. He was groping, trying to sound out the frightening abyss that had suddenly opened in his own mind, his own memory.

"Whatever you've forgotten is over and done," the doctor reminded him gently.

Degnan shook his head to clear it, said between his teeth, "Sure. That's right. What matters now is getting out of this, back to Earth—"

He stopped, jolted by the loudness

of his own voice. The darkness of the hold had grown suddenly denser with the death-stillness around. The weary murmur of voices, the fainter rustle of movement, had stopped as if everyone had become stone.

And it seemed to Degnan that he had seen a faint light flicker and vanish, but had thought it a trick of his eyes. The next moment he knew it had been real, as a chilly sibilance, like a snake's sound, cut through the silence and came nearer.

He caught an eye-stinging whiff of formaldehyde. There were gasps of hard-held human breath, and the sighing hiss of the propulsion tubes attached to the Venusian's body as it moved purposefully among the helplessly floating, blind Earth people. It could see, no doubt, if only dimly by infra-red in the stifling-hot hold.

the creature was hanging very mear him, motionless, for the hissing had ceased. Perhaps it was watching him and no other, with those great sightless-looking eyes whose glittering reflections under light would seem an empty fire of hell....

He almost screamed, and twisted convulsively like a hooked fishwhich for all practical purposes he was, for a fang of hot metal had bitten through his shirt and skin at the meeting of shoulder and neck. He felt the barb grate against his collarbone and pain came flooding as he was yanked into motion through the air. Then he was drifting free again—and a hard invisible wall collided violently with him. He scrabbled at it, seeking a hold that would let him launch himself at the enemy he could not see, and the effort thrust him away from the wall to dangle helplessly in the blackness where there was no up, no down, nor

any way at ail, and he did not know whether the smarting in his eyes was from tears of rage or from the creature's formaldehyde reek.

Someone whimpered like a trapped animal, and Degnan collided again—this time with something soft and moving, another human. They embraced one another by common consent, with the blind need to grasp at a stay in the spinning void. Then Degnan knew that the other was a woman; he felt her strangled sobbing and heard it in his ear, and by that sound was sure it was the girl he had been talking to a few moments ago.

"Steady," he muttered foolishly.
"Maybe it won't--"

Something blunt and hard punched him breathtakingly between the shoulder-blades, and lights danced before his eyes. Some of the light persisted until he knew it was really there. The Venusian had propelled the two of them, still clinging together, through an opening door into a communication shaft, and there was dim red light in the shaft, enough that Degnan could see and reach out to snatch at the handholds fixed inside it—

He was thrust sickeningly, painfully away. They drifted along the tube toward brighter light, and as their bodies turned slowly in air, Degnan saw the Venusian following. Its hunched leggy form-which, if it had been far, far smaller, scuttling round and round in a kitchen sink. would have been merely disgusting differed not at all from that of the Under Race, with some of whose members Degnan had talked and traded and almost made friends. But the huge compound eyes, that gave it three hundred and sixty degrees of vision, gleamed with the bale-fires of a dreadful intelligence. Or perhaps you only thought you saw in those

eyes what you knew was behind them: the total mentality of the Over Race, which might be called superhuman with as much or as little justice as man's mind could be called supercanine...

It had a long-hafted goad like an elephant man's hook, with which it prodded them impatiently once more. It must be uncomfortable here. The air in the shaft was muggy-hot and stifling with formaldehyde gas, but it was humanly endurable, which meant that the Venusian, save for its breathing apparatus and the complicated protective garment that sheathed most of it, would have died in it almost equally fast from oxygen poisoning and from freezing.

There was something funny—the Venusians had gone to the trouble of exhausting their own air from this part of the ship and replacing it with something like Earth-normal. They must have some very special motive for fishing two living humans out of the hold. Degnan's flesh crawled when he tried to guess the reasons they could have.

THE MONSTER behind thrust them forward again, and they drifted out of the communication shaft into a room—forward of the ship, Degnan judged by its size, and lighted with the murky red glow that was all human eyes could register of what for Venusians was a brilliant illumination.

There were two more Over Beings here, afloat side by side, watching. Degnan knew more about Venusians than most men, but he couldn't read their expressions—his experience among the Under Race didn't help him there; these creatures were as different in mind from their poor relations as they were in body from man. But he recognized the insignia one of them wore as those of a high

officer in the Venusian fleet—surprisingly high to be aboard this miserable cargo shell. Both of them were armed, and Degnan's other thoughts were lost in the craving to get his hands on one of those weapons.

He saw something else that made his heart bound with illogical hope. At four places around the red-lit chamber's periphery the wall bulged smoothly inward, and an airseal door was inset into each curve. Those, on this model of ship, marked the berths where emergency rockets, provisioned and fueled, were carried when a crew was aboard... And one of those doors was standing open, more red light glowing beyond.

The madness of the idea didn't occur to Degnan then. He twisted and got his first look at the girl he was holding and who held to him. Her face floated before—above, below?—him, ghost-pale in the bloody light, darkly haloed by hair that drifted in wild weightless disorder. As he had half-expected from her terrified rigidity, her eyes were wide, dilated, unseeing. He tried briefly to pry one of her hands loose from his arm, and knew he would have to break her fingers first.

She had to be jarred out of it, and that inside seconds. Already he could hear the hissing of the third Venusian's air-tubes, emerging from the shaft.

Degnan clenched his teeth and slapped the girl's face; her panic grip loosened, and he caught her by the shoulders and shook her till he was afraid her neck would snap. But he saw her lips move, the pupils of her eyes return to normal size, and he whispered sharply, "Do you hear me?"

She nodded dazedly. The Venusian that had brought them out of the hold was hovering close, barbed goad poised; the red chamber was turning slowly about them. Degnan whispered, "There's one chance. When I say 'Go!', we'll shove off in opposite directions. Action and reaction. You try to occupy the one there; I'll take the two on the other side."

She drew a shuddering breath, said, "All right." He was thankful she didn't add what they both knew—that the chance was no chance at all.

"Get ready, then," said Degnan harshly. They braced themselves against each other and waited for their slow rotation to bring them into position...

The high-ranking Venusian floated into Degnan's field of vision with a soft hissing. One of its almost-hands of delicate claws and flattened pads was extended, holding something that gleamed and that Degnan recognized—too late, a fractional instant before it exploded into blinding light.

The flare was literally blinding; when it vanished he could see only confused darkness. He had met it before, when he was seized, and knew it for one of the Over Race's clever new devices for dealing with Earthmen-one harmless to themselves, since it used light invisible to Venusians. But there was something funny about this time. The darkness didn't stay on and slowly clear up, but he stay on and slowly clear up, but he and shadow, seemed to be plunging into concentrically smaller circles of buzzing nothingness, himself dwindling away to nothing, losing consciousness....

THE RED light burned once more. The air was murk-red, close and stuffy, and something somewhere was going "Blip...blip. Blip...blip," in a curious paired rhythm.

And someone was shaking him by the shoulders, almost in time to the noises. Degnan snorted, gulped down a sudden sickness, and sat up, looking into the face of the dark-haired girl.

"Turn about's fair play," he said dizzily, "but you can stop now."

She drew back, gazing at him with intense relief. "Thank heavens! Now maybe you can do something."

Degnan threw his legs over the edge of the bunk he had been lying on and stared blurrily at gleaming dials and instruments set into an opposite wall, very close and curving. He passed a hand across his eyes. "Do—what?"

"Find out where we're going—and —and do something about it."

The man's head was clearing. Now he became aware of the low monotonous rumble of a rocket drive; that, and the cramped quarters, and the red light, told him where they were. But once oriented, he only felt more bewildered. They were in an emergency rocket from the Venusian freighter, and it was under power.

The girl was watching him as if expecting him to produce a rabbit from a nonexistent hat. Her hair, still tangled, hung normally about her face now-one Venus gravity would be the acceleration of the lifeboatand the traces of hysteria were gone. She was as rumpled and soiled as Degnan; she was thin, and her face with its bright expectant eyes held shadow-smudges of suffering. And for all that she reminded him somehow of Athalie-Athalie far away and dear, a part of the pleasant dream that life on Earth seemed now. But Athalie was blonde and richly curved, and he had never seen her other than immaculately clean, sweet-smelling, well-groomed

He heaved himself shakily erect, glancing round the interior of the rocket. Half of it was bunks, uncomfortable but endurable for man or Venusian, three of them, one above the other; the other half was filled

by an instrument panel with another bunk above that. The blipping came from the panel and went on and on maddeningly.

The controls he saw were oddshaped, made for Venusian claws, but mostly recognizable; few and simple compared to those of a regular space ship. The rocket was not equipped for complex navigation or sightseeing; there were no vision devices, no calculator.

"That noise," Degnan said over his shoulder, "is a radar echo. This type of boat has an elementary pilot mechanism that automatically heads for the nearest planet-sized body. It's bouncing a beam off the nearest planet—listen." The thing went 'Blip...blip.' The interval is the time it takes for the echo to get back. Twice the distance to the planet in light-time. Which means it's pretty close. If it's Earth, we'd be inside the Moon's orbit."

"If it's— Do you think it's Earth?"

"Yes," said Degnan deliberately. "That's the likeliest—considering how long the Sheneb accelerated and how long we were in free flight, we could hardly have been close to anything else. It couldn't very well be Mars, and Mercury's beyond the Sun..."

"Earth!" the girl said in a choked voice. She watched him with puzzled eyes as he turned away and sat down heavily on the bunk's edge again. "But—aren't you going to—"

"—do something?" Degnan shrugged ironically. "The robot's steering on the radar-sight, and I couldn't do any better. There should be an automatic parachute-release, too, when we hit atmosphere—but we won't need that. Earth's at war now, and nothing bigger than a pebble

could slip past the interceptor barrage. We ought to be picked up before long."

"Oh," sighed the girl.

"Now," said Degnan, "let's you tell me something. What happened? How'd we get here?"

She looked at him blankly. "Why —we got away—didn't we?"

"We were about to try. But I didn't duck in time."

"Oh, yes—your plan." She smiled uncertainly, a frown puckering her brows. "Evidently it worked."

"I don't know what you're talking about," said Degnan rudely. "We both must have passed out."

HE THOUGHT hard, aching head in his hands. And cloudy pictures rose in his brain—memories, or half-memories, plucked with difficulty out of emptiness. Himself, wresting the steel-tipped goad from the Venusian's grip—battering at the others with it, smashing a chitinous head. A couple of jointed legs afloat in the air and twitching gruesomely. Thrusting the girl through the open door, diving after her. Launching the lifeboat into space....

In clipped syllables he imparted those fragments to the girl as they occurred to him, and she nodded thoughtfully. "Yes. Yes, that's the way it was."

Degnan flexed his right arm and tested the muscles of his back likewise. He said, "I'm stiff and sore enough to have been in a fight. And if we both remember it, it must be so. But neither of us remembers very clearly—isn't that right? In other words, something smells!"

"You know what the doctor said about memories."

"Uh-huh. We forget unpleasant things." Degnan smiled grimly. "But if I really smashed up three Over Racers—that's a pleasure I'd never forget. And I'd feel good now—but I don't. That bothers me, too." The girl gazed at him helplessly. Degnan grinned with sudden abandon. "The answer I can think of—I must be a dual personality, and one of me's a superman. That's the only way we could have got away like that; we didn't have the chance of a snowball in hell."

He got restlessly to his feet, paced the cramped space of the rocket's eabin. His last sharp-etched memory was of that greater red-lit chamber aboard the Sheneb, the watching monsters, the blinding light. Beyond that everything was fuzzy, even now that they had compared notes. And something else was eluding him. Something was wrong about here and now, about this ship.

He turned sharply on the girl. "Look—what are we breathing here?"

She stared wide-eyed and said without conviction, "Air."

"Obviously. But where's it coming from?"

"The aerator. I knew enough to check that, before you came to."

"Yeah, sure," said Degnan softly.
"But that's a Venusian aerator. It should be turning out formaldehyde—not oxygen. Furthermore, the temperature here's about thirty degrees Centigrade, where a Venusian thermostat should be holding it at a hundred."

She bit her lip. "Then—the Venusians must have fixed it that way. On purpose."

Degnan looked at her with a surprised new respect. "Go on," he urged. "Develop that thought."

"I—can't," she faltered. "I don't bee why."

"Neither do I," said Degnan black-

ly, and resumed his pacing. "But so help me, I'm going to."

The girl gazed at him with veiled intentness. She saw a rough-hewn face masked now by two weeks' growth of crisp black beard—that must have got its swarthiness from an admixture of American Indian blood, whence also high cheekbones, and a thin, determined mouth that might under the wrong conditions be cruel. It was not the face of a man accustomed to be baffled long.

"Yes," she murmured, "I think you will."

IT WAS less than an hour later when the radarscope changed its note abruptly and emitted sharp staccato sounds that, translated from interplanetary code, were a peremptory "Heave to!"

Degnan had made a note of the rocket control; he shut the power off and, floating weightless once more, sought for and found a two-way radio. He tuned it, and brought in a hard-boiled voice, speaking English with a Latin accent, which said it was the Chilean battle cruiser O'Higgins, and ordered, "No funny tricks. You are covered, senores cucarachas!"

With fervent persuasiveness, Degnan explained that they were not cockroaches, they were human. The voice sounded unconvinced, then half-convinced—all the same, a booby-trap expert must board them before they could be picked up by the cruiser.

"That," Degnan admitted, "is a sound idea."

The girl caught her breath. "Do you think this ship is a trap with us for bait? That would explain—"

"If in a few minutes we get blown to atoms," said Degnan levelly, "it'll just about explain everything."

But after some fifteen minutes the lifeboat, pronounced safe as inspection could make it, was engulfed by a huge lading lock in the cruiser's side.

Aboard the O'Higgins there was gravity again—naturally, since the cruiser had, like all modern warships and very few other vessels, a full gravitic drive, which meant that its acceleration was limited not by human capacity to endure but by its power plant's ability to give out, and that it could spiral faster than an ordinary ship could travel a straight line.

Degnan, bedraggled, unshaven and red-eyed, clambered out of the life-boat's airlock and confronted a brown smooth-faced little man immaculately glittering in uniform.

"I am Menendez, capitan de la Armada del Espacio. And who are you, who come to us under circumstances so peculiar?"

"Ralph Degnan's my name; better make a note of it," said Degnan curtly. "The two of us have just left the custody of our friends the cockroaches; we couldn't be choosy about the circumstances. Ex-freighter Sheneb, apparently heading toward Neptune..." He glanced sidelong at the girl; she looked ready to faint now that rescue was an accomplished fact, and was making futile absent-minded efforts to repair her face and costume, without seeming to pay attention to what was being said. Nevertheless, he switched to Spanish, becoming more polite in obedience to the form of the language: "If Your Honor pleases, I will request that he land me at the city of Los Angeles."

Captain Menendez raised a startled eyebrow. He said stiffly, "We land at Valparaiso, six days from now."

"Es preciso." Degnan's eyes bored steadily into the other's. "If Your Honor will check my identity with North American Military Intelligence..."

The captain was startled again, with the other eyebrow. He recovered himself. "Very well. By all means, senor Degnan. And while the check is being made, with what may I serve..."

"Un bano!" said Degnan prayerfully.

A BATH and shave achieved in the cramped facilities of a cabin in officers' quarters, and the food he was brought devoured, Degnan lit the first luxurious cigarette in two weeks and thought briefly of the dark-haired girl—mostly of how little he knew about her. He didn't know who or what she was—or even whether that was important.

What was important—a gnawing feeling told him—was the confusion in his own memory. The enemy had done that, somehow; on Venus, Degnan knew, psychology was the mother of sciences, like physics on Earth, and they had had plenty of chance to study the human mind, which they considered so inferior to their own.

It was so vivid, that glimpse of a Venusian like a smashed bug sprawling in midair, a couple of detached legs jerking. Vivid, but somehow it lacked the essential stuff of reality. It fed without appearing his bitter hatred of the Over Race.

He couldn't say just why he hated them so intensely. It was a feeling scarcely connected with what he, personally, had suffered; the best reason he could think of was his instinctive sense of their abnormality, some monstrousness about them wholly apart from their unhuman form. In a sense, the dominant species of Venus was an artificial product; they didn't come normally from eggs like the Under Race, but out of the hot spawning beds where forcing and selection kept the recessive mutation that had created them alive.

Degnan shook his head angrily. The Venusians couldn't have made him a tool in any fantastic scheme they might have for getting behind Earth's defenses. That left the lifeboat—which some time ago had been cast off into space, headed back toward Venus with jammed controls. And the girl: was she Number One? She looked like only an unhappy young woman who had been an inconspicuous clerk until caught in the vortex of interplanetary war, who was as innocent as her story...which could be checked easily, of course.

He wouldn't have to worry about her any more. Unless—which was unlikely—they ordered him to when he reported in Los Angeles. He lit a second—or was it a third?—cigarette, and tried to let the smoke sooth away his trick memories and the all-too-real recollection of the black and crimson hell on the Sheneb.

A knock at the cabin door, and an orderly was there, saying respectfully: "El capitan le atiende."

Captain Menendez was affable. "It is impossible for the O'Higgins to leave her patrol, Colonel Degnan—but a North American liaison vessel will come alongside to take you off and to Los Angeles. That will be before very many minutes now. Your Intelligence was delighted to hear that one of their agents had escaped the claws of the Venusians. Y es verdaderamente un milagro, no?"

"A miracle—yes," admitted Degnan with gloomy reserve. That was just

what was bothering him so much.

Menendez looked puzzled; he said severely, "You are more lucky than you know. I have received a dispatch about the ship that you escaped from —a freighter, was it not, of a type like our M3s?" Degnan nodded.

"Then it can be no other. It tried to run away, and the warship that had ordered it to stop was forced to open fire."

"And the people—the Earth people on it?" asked Degnan with stiff lips.

The captain shrugged. "Of course their presence was not known," he said apologetically, then brightened: "But you see how effective is the Patrol. If the cucarachas come close enough to look at our Earth-one pounce and we are on them!" He glanced round him, swelling a little, and Degnan sensed the little man's proud confidence in the steel length and strength of his great ship, its power and its armaments that could lay waste to a whole planet's surface. The Venusians too had ships like this, but not as many as the United Nations of Earth; and in the tremendous battleships, compared to which a mere cruiser was a mosquito, they were hopelessly outnumbered.

"Tell me," said Degnan, "how has the war gone? Where I've been, there wasn't any news."

Menendez shrugged again. "Nor have we heard much. In the last days our forces have occupied Neptune and the Venusian moons of Jupiter and Saturn, but that was a trifling affair; they had been evacuated already. So far we are defensive; we guard ourselves and prepare. Of course," he tried to look knowing. "I cannot tell you the plans of the Combined Fleets. But one thing I tell you: this war will not be long."

"I hope you're right," said Degnan, then realized that he was repeating the doubtful words of the doctor on the Sheneb.

"Oh, yes—one more business. Do you wish that the senorita be sent to Earth with you? She is of your nation."

With an effort, Degnan brought his attention back to that problem. "She'll have questions to answer, I think—" He stopped short. "Yes, send her along."

ON THE SHORT trip to Earth, Degnan scarcely noticed the girl or anyone else; he was greedily wrapped up in studying a Los Angeles newspaper, borrowed from the lieutenant in command of the courier vessel.

He was somehow disappointed by his first real glimpse of Earth's reaction to the interplanetary war that was only nine days old. There were many columns of "war news" but very little news. A feature article on the interceptor barrage which made Earth a fortress, and which was claimed-it seemed to Degnan not very convincingly—to be far superior to that with which Venus had surrounded itself. On the front page in boldface type a noncommittal communique from the new Combined Fleet Headquarters, Somewhere on Earth. Elsewhere, articles that hinted nebulously at the plans for a tremendous offensive being perfected by the world's best military and scientific brains at that hidden base, whose location was secret lest the enemy concentrate some desperate, all-out thrust on it...

Degnan snorted, smelling a rat. He knew that there was no need to figure out an attack strategy now; the plans for offensive action against Ve-

nus under all conceivable circumstances had been ready and on file for years as a matter of simple precaution, ready to be put into effect at any moment.

Still scanning the paper, he did not notice that the messenger-boat had landed until a crewman touched his shoulder. As he rose, he saw that the port was already open and the girl had disappeared. It struck him suddenly that he had never learned her name; he scowled and told himself to forget it.

It was a sunny afternoon and the sky of Earth was blue. Outside Los Angeles Spaceport he halted on the sidewalk and blinked, almost overwhelmed by the actuality of swarming human life that went on under the shadow of Venusian war.

Gleaming traffic flowed swiftly by, with Los Angeles traffic's traditional disregard for life and limb. The people who crowded the streets in the sunlight wore holiday faces, filled with social gaiety or smug relaxation or petty clinging worries. Among them, the frequency of uniforms, soldiers and spacemen, showed that times were something more or less than normal. But not one of them looked toward the sky in either fear or defiance.

Beside the gateway was a poster, displaying a hideous and inaccurate painting of a Venusian, its prehensile paws upraised in an unnatural pouncing pose. The caption was screamingly funny. It said: EXTERMINATORS WANTED. ENLIST TODAY!

Degnan stared at it with a curious sense of distaste. There was such a vast difference between this cartoon bogey and the reality of forty million living monsters on Venus who planned and worked coolly, purposefully, with all the power of their alien, total minds, to shatter and end the carefree world of man...

A MAN WAS standing at his elbow, thoughtfully watching him. Degnan turned deliberately, a chill question ready in his eyes; but that evaporated as he met a familiar face. "Jay Marlin!"

The other grinned easily. "That's right. They told me to shepherd the stray lamb back to headquarters. You look like you need an escort, too—sort of lost."

Degnan nodded slowly, fumbling for words. "I feel like a stranger here, someway. I must have expected...oh, hell, I don't know."

Jay's smile grew quizzically sympathetic. "You must have been through the mill, Ralph. But that's why General Fleming is so anxious to see you. You're the only man who was on Venus when the war began and who got back to tell us about it."

A plain maroon sedan was waiting. Degnan sank into its cushions with a sigh of disbelief.

He said lamely, "I've not had time to get a report ready."

"You're to make it verbally to the General himself. I told you he was anxious."

Degnan was silent. It came to him like a dash of ice water that he could report exactly nothing on the period of time they would be most interested in. Did he detect, lurking behind Jay Marlin's unchanged friendliness, just the faintest note of watchful distrust? They would be justified in holding him in suspicion. He was forced to suspect himself, so long as that torturing twelve-day blank defied him, held its secrets though his hands clenched involuntarily and the

blood pounded in his ears with the effort to remember...

"Sorry," he said absently. "What'd you say?"

"I said," repeated Jay," "we're there."

THE LEATHER-BROWN face of General Fleming, district chief of NAMI, was covered by a crossing, branching and interlacing system of deep wrinkles, which, as the shrewd mind behind them chose, could be amiable, stern, persuasive, ferocious or impenetrable. The General wore his impenetrable look as he listened to Ralph Degnan's tale.

At last he said, "Is that all?"

"All I can remember," said Degnan steadily. "As I indicated—it's quite possible I've forgotten something important."

"Um, yes." The General switched off the recording machine that had been humming quietly on his desk, thus making the rest of the conversation private. "We'll come back to that." He leaned back with half-shut eyes that still watched Degnan narrowly. "The first part of your report, on the Venusian primitives, may come in handy eventually, but hardly now. Your findings are negative; we'd accomplish nothing by trying to stir up the Under Race against its masters, since it's too backward technologically to count at all in a modern war."

"Still," said Degnan, "they're people, in spite of their looks. The Over Race aren't."

The General gazed at him soberly. "To be perfectly frank, Colonel—in your expressed judgment of the Over Race I seem to hear a note of hysteria."

Degnan choked back quick resentment. He said in a carefully controlled voice, "I think we're underestimating them. I'm not a defeatist. But their conviction of their own superiority—"

The General snorted, his wrinkles ferocious. "That's what I mean. You've let them get your goat. Convince you they can defeat us with occult mental powers, or some such rot!"

"Remember," said Degnan stonily, "they have total mentality. They think consciously, logically, with their entire brains, while we use only a small part of ours for that, and the rest is unconscious mind—emotional, rather than logical."

"That's why I think the fact that the Venusians deliberately began this war is—well, ominous. They're constitutionally incapable of fighting just because they're mad. They don't get mad. They've begun it because they think they can win. We outclass them in all ways of making war that we know about. So—they must be ready to make war in ways that we've never heard of." Degnan drew a deep breath, curiously relieved at having brought his own buried fears into the open in plain language.

"They haven't shown much sign of it so far. No Venusians ships, except the tub you were on, have come near our patrols for several days now. They've sent across a good many bombardment rockets—cheap imitations of ours, like their ships—but not a one has got through. Now, where's their terrible secret weapon?"

"I don't know. I do have an idea, though, about one thing they must be banking on. Our fleets were prepared long ago; why haven't they already blasted Venus?" The General was silent, and Degnan knew he had touched a live spot. "Maybe it's because our fleets are national, and

each of our sovereign 'United' Nations is holding back, for fear of losing its one or two or three battleships and being at the mercy of its Earthly neighbors when Venus is licked!"

THE GENERAL squinted at him, observed in a dangerously soft tone, "You're talking now, Colonel Degnan, about things that are out of your province and mine as well. Strategy is made by Combined Fleet Headquarters."

"I'm on the outside, but I can still think."

"Maybe," said the General with an odd grimness. He made his wrinkled visage stern. "Now I'll tell you about the Venusians' secret weapon. Though I shouldn't have to; you seem to be a casualty already."

Degnan merely stared at him. A moment before he had been hot with conviction; now he was cold, feeling fear contract about his heart again.

"We know what they've been trying to do," rasped Fleming, "and
we're putting a stop to it. During the
last twenty years, a lot of Terrestrials have been on Venus for shorter
or longer periods. And off and on,
especially in the last few years, we've
been considerably irritated by their
kidnaping our citizens—as you were
kidnaped. Always the same pattern—
grab one of our people, then release
him after a while, with apologies but
no explanations. And they must have
got to a lot of humans without our
ever knowing it.

"Now we know their aim was to work on the minds of as many Terrestrials as they could, which was probably several hundred. They're good at psychology and that sort of thing, including hypnosis; I'll grant they know more about that than we

do. And they were using hypnosis to turn those people into traitors—so many Venusian agents—back here on Earth."

Degnan said, fighting against a wild sinking feeling, "You can't hypnotize a man into betraying what he believes."

"So the psychologists tell me," admitted the General heavily. "I'm not saying your loyalty's been subverted, Degnan. But they did get to a lot of people who weren't very well-balanced to begin with. We've been rounding them up-everybody who's ever been on Venus gets checked and double checked. And we've uncovered a lot of bad eggs already. They've even got an organization of sorts, centering right here in Los Angeles, since most of the ships went out to Venus from here. That's one reason you were given an escort from the field.

"In your case—you can see we'll have to suspend you from active duty. You'll be given an association-test before you leave this building; if its results are negative, you'll be at liberty, but you'll have to come back for detailed psychiatric examination and treatment if indicated."

Degnan was pale under the swarthy complexion that not even sunless Venus had been able to blanch. He moistened his lips, said numbly, "I see."

The General rose and extended his hand. "I'm glad you understand that we can't take any chances. No hard feelings, then?"

"No, sir," muttered Degnan, not knowing whether he lied or not.

HE WASN'T surprised when they let him leave after the association-test; he knew enough about such things to be sure that his unhesitat-

ing responses had been the right ones. Loyalty to one's nation is evinced by the right automatic responses to certain key words, such as "liberty", "king", "fatherland", "the proletariat"; and loyalty to the species, though a deeper, truer, more instinctive thing, can be measured in the same manner.

Whatever the Venusians had done to his mind—and they had obviously done something—hadn't affected his inmost self. They might have blanked out some of his memories and left him with post-hypnotic suggestions to remember things that had never happened, but they couldn't have indoctrinated him.

As he paused undecidedly in front of the NAMI building, a girl's cool voice called, "Ralph!"

He looked up, and saw a vision of splendor—a smooth new sky-blue car, plastic top pushed back, parked by the curb in front of him, and Athalie Norton gazing at him from behind the wheel, a shadow of annoyance on her flower-pretty face that was framed by spun-gold hair.

"What's the matter, Ralph?" she asked crisply. "Did General Fleming deafen you? Get in—you can explain on the way out to the house."

He slid in mechanically beside her, without answering, which didn't seem to bother her. She fed power to the gravity-thrust motor and shot the car expertly out into the traffic stream with a surge that would have spun the wheels of anything whose power was transmitted through the wheels. Degnan watched her, reflecting that Athalie did everything like that—surely, with a sort of determined violence. Her fragile blonde beauty was deceptive; behind that mask she always knew what she wanted and got it. Once upon a time she had decid-

ed she wanted Ralph Degnan.

"How," he asked, "did you know where I was?"

Athalie smiled secretly. "I have ways—or Father has."

Naturally, thought Degnan. Athalie's father was a big man, with the bigness of the corporation he controlled. North American Steel. One way or another, he had made an astronomical amount of money. And Athalie was her father's money's child.

He wasn't sure he was pleased to see her so soon. There were things he needed to work out alone.

"What did they want you for in such a hurry?"

"They wanted," said Degnan grimly, "to tell me I was canned."

She gave him a flashing sidelong glance. "How come?"

"As a psycho, practically. Since the Venusians picked me up, my memory has holes and kinks in it—so NAMI can't trust me any more."

The girl sighed lightly. "Well... that's good. You need a vacation after all those ghastly experiences. Poor Ralph! You can stay at our place and take a good long rest."

EGNAN was startled by her reaction; then he remembered that his job had never meant anything to her but a minor irritation once the illusion of glamor it had had for her had worn thin. She would gladly have made a kept husband of him; he had sworn fiercely, privately, that she never would.

"Actually," he said carefully, "I'm suspended, indefinitely. That means until the war's over. But... I've got a nasty feeling there may not be any world after this war, Athalie."

She frowned daintily. "You talk like Father. Since the war started

he's gone crazy—acts like he thought he was twenty years younger, only he isn't. They requisitioned the Azor a week ago; so he offered to remodel it with his own money. And every time I go by our landing field, I have to see what they're doing to it—as if they couldn't fight the Venusians without spoiling that beautiful ship! I'm sick of hearing about the war. If you can't talk about anything else, Ralph darling, please shut up."

"Okay," said Degnan.

She looked at him longer this time, arching a delicate brow, and almost sideswiped a slower vehicle. "Have I offended you? I don't want to..." She had taken the roadway through Elysian Park, and now she turned the power switch to "Braking" and let the car roll to a stop on a small branching driveway behind a shielding screen of trees. Then she leaned back against the cushions, and her brisk wilful self-confidence seemed gone, she was suddenly younger, softer. She breathed, "It's been so long..."

Degnan wouldn't have been human if he could have disregarded that unveiled invitation.

But when she murmured dreamily, close to his ear, "This is real, Ralph. The real thing, and all the rest, all your silly worrying and fretting—cobwebs—" the soft words stabbed him like poisoned knives, and he drew away from her, with eyes grown suddenly cold and remote.

"I don't know, Athalie. I don't know whether you're as real as some of the things I've seen."

"What are you talking about?"

He tried to tell her, then, about the prison ship-Sheneb, the triumphant monsters and the humans whose black nightmare there had ended mercifully in a burst of atomic flame. She listened, uncomprehending, her nose wrinkling at last in disgust.

"That's all over. You're safe on Earth. Why not forget it?"

"I've forgotten too much already, I think. And I've got a feeling that remembering is important not just to me but to a lot of other people as well."

The scarlet pout of her lips was childish, but her eyes were a scornful woman's. "You think Earth won't defeat Venus without your help? I thought they told you your help wasn't wanted."

That stung; he snapped, "Nothing matters to you but your own selfishness, does it?"

He'd forgotten Athalie had a temper too. "You're the selfish one! You'd sacrifice me to some crackpot idea! Go on, spout about your patriotism or whatever it is you love more than you do me!" Once started, she didn't give him time for breath, let alone interruption, and her rage was self-fueling. "I hate you! Get out! Out of my car and out of my sight!"

Degnan had grown cooler as she grew furious. "All right," he said quietly. "I'm going."

BEFORE he was out the door, Athalie started the car with a jerk that all but sent him sprawling in the grass. He recovered his balance and watched the sky-blue machine whip out of sight beyond a tree-masked curve, as if racing to a date with a smashup.

Degnan shook his head ruefully and turned away, back toward the main road and the border of the park.

This wasn't their first quarrel, but he had a strong feeling that it might be the last. It was too bad about Athalie, because it really wasn't her fault. She hadn't changed; but Degnan knew objectively that he had, since thirty hours aboard the Sheneb and since twelve days of—what?—on Venus.

The blank was still there. It must be that out of it crept the uncanny sense of urgency that was stronger and stronger upon him. Of catastrophe, vast and formless, impending unless—or if?—he, and no one else, did something he couldn't quite remember.

As he plodded along the roadside, the scene with Athalie retreated to the back of his mind. Nevertheless, when the car eased to a stop beside him, he thought for a moment it was she, come back.

Then he saw that this car was different. An older model, black, ill-kept, its top almost opaque with dirt and scratches. It had the distinctive personality that old cars acquire, and it was somehow familiar.

But its driver was nobody Degnan had seen before. An oldish man, face marked by hard living like his machine's finish, he leaned toward Degnan, thumb still on the button that had opened the door. "Going downtown? Climb in and save your feet."

As the car rolled leisurely ahead down the curving parkway, his brain clicked with sudden, belated recognition. This same battered machine had been behind them all the way out here, following with a closeness and tenacity that could hardly have been accidental—that obviously hadn't been.

He didn't feel alarmed, but he did know a lively curiosity. He tensed invisibly, waiting for the move that must come. "Ever been on Venus, pal?"

Ah-ha, said Degnan to himself, and aloud, "You're psychic, huh?"

"Nah," said the driver. "You just got the look. I was there once, my-self."

Check, thought Degnan.

"Yeah," said the other man. "I was a spaceman once, believe it or not. Back before gravities, too, when you sweat out most of every trip in free fall. I been to Venus and Mars and all them places out there. Advancing the cause of Man's Glorious Empire—you know. Now I'm retired, on a pension a bedbug couldn't live on." He spat sidewise, out the window. "A guy gets a raw deal when they got no more use for him. Maybe you know something about that, yourself."

"I'm thinking," said Degnan coldly, "that you know more about me than you're letting on."

The man laughed shortly, "Okay, So you know all about me, and I know all about you, Mr. Degnan. Why not? We're two of a kind." Getting no answer, he went on rapidly, "We've got a lousy deal, and we know the system's rotten. Don't we? It all looks fine-" He gestured jerkily out the windows: they were back on a business street now, where even under the sinking sun the storefronts, the glittering beetle-cars, the walking people were luminous with life and color. "All pretty things and fun-but underneath it's rotten, shot full of holes. People, crawling all over the world-there's too many of them, and they're stupid. We know it can't last. Don't we?"

"You mean Venus is going to win the war?"

The other flashed a scared, uncertain glance at him; crawling though the car was now through the traffic,

his driving began to make Degnan nervous. "What do you think?"

"I'm no prophet. But I know this," said Degnan bluntly, "that you're human—but the thing that's talking out of you has bug eyes and claws for hands, and breathes formaldehyde."

He saw the man's hands cramp on the wheel; a moment later, as if in instinctive flight, they swerved the car into a sheltering side street. The voice held a hysterical note that was a fusion of pleading and threat: "I'm giving it to you straight. You're one of us. They got part of you, too, back there. They'll never give it back, that part of us, until they win. So they've got to win!" The last words were a whine of fear.

Degnan ruthlessly suppressed the jelly-like quivering of a kindred fear inside him, and sank his voice to an icy tone of menace. "All right, I've heard enough. I'm an Intelligence. agent, mister. Drive to NAMI headquarters. Don't try anything; I've got a gun."

That was a bad bluff, he realized as the other snapped on the brake, jerking them forward, and twisted, reaching, and snarling, "The hell you have!"

DEGNAN lunged across the seat; one flat hand caught the fellow under the chin and slammed his head back against the plastic cowl, the other chopped down with split-second timing on his wrist. Degnan scooped the pistol up and leveled it.

"Leastways, I've got a gun now," he amended with a tight grin. He felt almost grateful to the Venusians' slave for providing a splurge of violence to snap him out of his fruitless mental grubbings. And a new idea had struck him; he added, "But I

don't know whether it's really worth while running you in. The likes of you'll never damage the war effort much... Tell you what, rat. I'll turn you loose, if you explain about that last line you were handing me."

"What—line?" the man muttered dizzily.

"About the Venusians keeping part of you."

The other tried to look defiantly jeering. "It's not just me. It's you too. They've got your soul on Venus, and you'll never get it back unless you help them win!"

Degnan hesitated, then decided against further questioning. This bird evidently knew nothing, apart from what the Over Race for their own purposes had planted inside his skull.

He pronged open the door and thrust his hand with the gun into a pocket. "Okay, brother—you can go tell the other zombies to scratch my name off their list."

He gazed after the swiftly receding car with a grim smile. That injunction wouldn't be obeyed, he was sure—if he didn't meet that one again, there would be more of the same kind looking for him. Which meant, he hoped, a chance to learn more about the thing that most vitally interested him now.

Without much difficulty, he got his bearings and caught a bus for a part of town he knew well, close to the Municipal Spaceport. His plans were simple: he'd rent a room—since he had to stay in Los Angeles anyway, waiting for instructions from headquarters—lie low, and wait for trouble to come to him.

En route, he went over what he'd learned. It wasn't much. General Fleming had been right; there were Venusian agents, human ones, on

Earth. And Degnan knew the outlines of one type of induced delusion that the Over Race used to bend minds to their will.

But what had they used on him?

The business of captive souls, he snorted at. But the fact remained that he had lost, if not his soul, twelve days on Venus... Perhaps a psychiatrist would be able to straighten the tangled threads and ravel out his memories, when they got round to his case. But he sensed unreasoningly that something was going to happen before then, something terrible and irreversible, something that he alone must prevent...

IT WAS almost midnight when he finally found a lodging, for the city was overcrowded with the soldiers of the Fleet. The streets were full of them too, even at that late hour, wandering in groups and with girls, carefree as boys on an outing. Earth had known no war in their memory or in their fathers', and their brief military training had given them scant sense of what it might mean.

Degnan went to bed in a fog of depression compounded of his sense of impending disaster, memory of the quarrel with Athalie, and sheer physical weariness.

When he woke at two p.m. the last cause, at least, had been removed, and he felt more equal to the struggle—if only he knew what he was struggling against.

As he ate afternoon breakfast in a second-rate, uniform packed restaurant, his attention was snared by the modulated tones of a news commentator, rolling from the place's wideopen radio:

"Monitors on the Moon report that Radio Venus has broadcast something like an ultimatum to Earth. Receivers here didn't pick it up, of course, because of the all-wave scrambling by our defense barrage. But I'm authorized to pass on some of the juicier parts; they may give you a laugh, particularly when you remember the news we got a few hours ago—about how the Gharukh, the one first-class battleship Venus had under the Armament Limitation Treaty, was caught off base and blasted out of space by the North American battleship Alaska and the Chinese Yang Tse.

"But now the high spots of the Venusian pronunciamento. The Over Race announces as its war aims the extermination of humanity and conversion of Earth, according to a prepared 'planetary engineering blueprint', into a Venus-type world, with a cloud blanket and formaldehydecarbon-dioxide atmosphere.

"The alternative to unconditional surrender—destruction by a mysterious 'final weapon', which is ready to strike at any moment, but which the Venusians hesitate to use, they explain, because it might damage the planet Earth itself and put difficulties in the way of their conversion plan. So they call on us to surrender, offering as bait the promise that a 'chosen few' of the human race will be spared and allowed to migrate to Mars—'a suitable home for the cold-blooded poison-breathers who now inhabit Earth'.

"Surely no more evidence is needed that the war lords of Venus are completely out of touch with reality..."

Somebody in the cafe did laugh at that crack. But Degnan sat staring at the radio, and the glitter of its chromium recalled the gleam of great inhuman eyes, alive with intelligence and a coolly calculating consciousness of power.

Disgust crystallized in him, for the shallow humans who scoffed at the Venusians because they had never conquered space and had shamelessly borrowed and stolen the achievements of Earth science in that field. But the scoffers did not realize that Venus had a science of its own. Their science was not so much quantitatively as qualitatively different from Earth's, and its most basic tenets seemed sheer nonense to an Earthly mind...The Over Race had liberated atomic energy, for example, before the coming of the Earthmen; but no human scientist had ever fathomed the workings of a Venusian atomic engine. They seemed to regard the subatomic particles as possessed in some fashion of will and purpose, and they coaxed atoms apart with gentle persuasion instead of smashing projectiles.

That much Degnan knew—and he was very far from laughing at the Venusian ultimatum.

He realized with a chill start how close his thinking was coming to the propaganda line he had heard yesterday evening, about the decadence and stupidity of mankind. Had he too soaked up some of that mental virus? And what touchstone would serve to distinguish the ideas native to your mind from those deftly inset by a monstrous psychologist?

WHEN HE got back to his room, the green light on the phone recorder was aglow. From headquarters, a summons to come in for further examination, he thought with an odd stirring of rebellion, and flipped on the speaker.

A woman's voice, hauntingly known to him. "Colonel Degnan—this is Margaret Lusk, who was with you on the Sheneb.

"I have to warn you. Something

is about to happen—will begin happening very soon, that will be tremendously important to you and through you to—everybody. You must be ready."

The voice changed, became somehow more emotional, more human, and still more familiar. "If you'll meet me this evening at seven, in front of the City Museum—maybe I can tell you something more. I can't promise, because I don't know how I know what I said before... But please come. You've got to come!"

That was all. The recorder hummed unnoticed for a time; finally Degnan spun it back and ran the message off again.

Whatever the quirk in his head was—delusion, premonition—he wasn't alone with it. He had company, and the knowledge was a straw to cling to.

Warmly, though he thought impersonally, he remembered the darkhaired girl called Margaret Luskridiculous that he hadn't learned her name before, after all they'd been through together. He felt a queer bond between himself and her, born of a few long, long minutes aboard the Sheneb; and he found himself, half-consciously. comparing memory of her face, ravaged by suffering and terror, with his last glimpse of Athalie-blonde beauty marred by passion, her furious blindness to everything but her own desires. The comparison was in Margaret Lusk's favor.

Above all, though—she might hold the answer, or a part-answer, to the question that was becoming his nightmare.

BEFORE seven o'clock he was marching restlessly up and down in the park grounds before the

Museum. In the warm gathering dusk, there were other strollers otherwise preoccupied. Couples arm in arm, walking or sitting on the benches and talking and laughing softly while darkness came over the city.

In the west, above the trees, a bright star shone before the rest—Venus as evening star. The people in the park saw it, but their gayety was not damped by it.

As the night came nearer, Venus grew brighter still and the other stars came out, and high up among them brief sparks of light streaked swiftly like the burning pebbles of a meteor shower, and died redly or flared out of existence in soundlessly brilliant explosions. They came as often as one to the minute, in every part of the sky, and Degnan knew what they were—bombardment rockets from Venus approaching Earth at five hundred or a thousand miles a second, caught and wiped out by the interceptor barrage.

Ahead of him a girl squeaked with a tingling thrill of fright and snuggled against the soldier with her, as they saw one flash out brighter than the rest.

"That was a near one," said the soldier gruffly. "Must not have stopped it more than two, three hundred miles up. But," he swelled his chest a little "we're safe. Not a one's got through, and not a one's going to."

The girl murmured something admiring.

Margaret Lusk was late showing up. Degnan was begining to wonder if she'd stood him up, or if there had been some mistake in time or place. And then he glimpsed her at the other end of the tree-lined walk he had been pacing, turned and hurried toward her.

As he came near he saw that it was really she, trim and tidy as he had not seen her before, her dark hair braided neatly about her head. She saw him too, smiled quickly and started to call to him...

A huge and blazing star glided clear across the sky, drenching the Museum's grounds and the whole city in an unholy bath of reddish light. Far to the eastward it touched the Earth, and a second later a mountain of searingly radiant vapor began rising there, boiling higher and higher and turning night to day even as the fire-trail faded.

By that glare, Degnan saw the girl's pale face and wide eyes looking like holes burned in a blanket. He said idiotically, "We're all right. The city wasn't hit."

"It's happened!" she gasped, and he couldn't tell whether her tone was terror or ecstasy. She stood stiffly beside him but apart, gazing at the rising pillar of fire.

Degnan's ability to think came back; he snapped, "Better get down. Flat on the ground. The shock-wave'll be here before long."

But it was minutes before the ground heaved and shuddered with earthquake. On the heels of the earth-wave came the air-wave, a hurricane in violence, and in its midst the lights in the Museum facade, which had so far burned steadily, went out as something happened to Los Angeles' central power plant. Screams rose then from among the people scattered in the park.

THOUGH Degnan didn't know it then, he had seen the arrival of the first of the hyperspace projectiles, which landed fifty miles east of Los Angeles. The manner of its coming was this:

The great robot brain in Denver, which coordinated the defense barrage over all North America and parts of the Pacific and Atlantic oceans, registered, routinewise, the approach of a Venusian missile aimed at the West Coast. Nothing unusual; a torpedo of normal size, traveling at the somewhat low velocity of five hundred miles per second. In routine fashion, also, the calculator transmitted the information to its human watchers at the same time that it made the necessary computations and sent out the necessary orders to subsidiary units of the interception network. No special alarm was sounded, since it was a simple piece of work to encompass the projectile's destruction.

To do that, the robot brain in essence set up within its own structure the rocket's flight in space and physically possible evasive maneuvers, correlated with the positions of the mines strewn lavishly in orbits about the Earth. It sent out the signals to set those mines in motion that would carry them across all possible paths of the missile, with their blast guns, their charges of atomic explosive and their seeking, thinking controls.

Within the brain the paths converged, met, and the rocket was destroyed.

But in the reality of space, ten thousand miles out—a detector in the Venusian projectile tripped a switch at the first contact with Earth radar, and threw it into hyperspace drive. And it never reached any of the predicted positions, never encountered the searching beams or the shattering explosions.

The robot brain knew that within a fraction of a second. It rang the alarm, this time, and simultaneously sent the inner belt of mines into action.

By now men were incredulously

watching the instruments that registered the hyperspace projectile's flight—or tried to register it; the wild shifting of the needles, the crazy fluctuation of the graphs could not be translated into any meaningful space-time coordinates.

While they stared, helpless, the embattled calculator used its last resort; hundreds of interception rockets, tiny, viciously potent proximity-fused things, left their launching sites and climbed at a hundred thousand gravities' acceleration to meet the enemy.

It evaded them, too, still flying its impossible course, and fell not far from San Bernardino, which together with neighboring Riverside and other towns and villages around, vanished that instant from the face of the Earth. Like most such weapons, the hyperspace projectile bore no explosive warhead; but it struck at five hundred miles a second. It blasted a crater a mile across, and the shock waves from it did much damage in San Diego.

By that time the second one, which landed on Calcutta and killed two million people, was coming in toward the Asiatic sector.

DARKNESS, pallidly relieved by the rising moon, lay with strange silence on the great city. Somewhere, far off, sirens sobbed of disaster.

The girl stood facing Ralph Degnan, her back against a tree-trunk in a vaguely defensive pose. He could not read her face, a white blur in the shadow.

He commanded again, "Think! What more do you know?"

"I don't know," said Margaret Lusk. "I had to send you that message, that's all. Something told me to call you—but not about meeting you here. That was my idea." "I can guess what 'something' was," growled Degnan. He wanted to question her ruthlessly and to the point, but he was finding it hard to concentrate. Something was churning in his mind, struggling toward the light like a formless monster heaving itself to the surface of a swamp. Since the projectile's fall he had felt that—the sense of being about to remember something once known but forgotten.

His outward senses seemed to strain sympathetically toward hyperacuteness. He thought he heard rustlings round about, a stealthy scuffing of feet in the park shrubbery...

An idea struck him with shocking force. He demanded, "Say! How'd you know where to call me? I only found that room late last night!"

She made no reply, but he heard the quick, suspicious intake of breath.

"Answer me!"

Then the slight sounds he had heard and half-dismissed materialized into a rush of pounding feet from every side at once. Instinctively he ducked and spun around. Someone tackled him round the waist and hung on, and other hands were laid on him. His fists lashed out at indistinct figures, and smote air as often as flesh and bone; he lunged furiously, and had a moment's hope of breaking free before something blunt and hard descended stunningly on his head.

The blow made the joints of his skull creak like rusty hinges, and for a while time stood still. When he began to struggle out of the fog, there was a while when he only wanted to crawl back under it and leave his headache outside.

He grew aware that he was sitting propped up, and the feel of the cushioned seat and its slight movements told him he was in a car. Someone was on each side of him. He thought: I'm getting lots of free rides. Then he realized that this was a Ride in the worst sense of the word.

A BRASSY voice was speaking— Degnan couldn't see, because something like a sack was pulled smotheringly over his face, but he formed an instant dislike for the speaker— "I say get rid of him. Hell! If I'd hit him a little harder, there wouldn't be any argument."

"Nah," said a whining voice that he remembered sharply, from yesterday evening, "you couldn't hit that hard, Clark. His head's so thick, even they couldn't pound anything into it."

"Maybe I'll show you if I could," said Clark viciously. "Now, what's wrong with stopping right here and kicking him off a pier? We got enough troubles without him..."

"Will you listen to me?" broke in a voice that chilled Degnan to the bone, for it was the voice of Margaret Lusk. "I tell you, he knows something. He has a command. Or why would I have been told to send him a message?"

Degnan thought dully: Slaves of Venus, all of them. I was going to lead them on and find out what they know about this hypnotic business—so I walked straight into a baited trap. And now I'm supposed to know something they don't!

What, exactly, was he supposed to know?... Oh, yes. Sure. That's right.

He remembered, but not the where and how of his coming to know what he did. It fitted somewhere in that twelve-day blank that he still couldn't fill in consecutively... It was like in the stories

where a crack on the head cures the hero's amnesia; but he knew it wasn't that simple.

Clear to him were principles and details of the construction and operation of the Venusians' new weapon, the hyperspace projectile, and of the hyperspace drive in general—a startingly simple modification, simple at least to Venusian minds, of the Earth-invented gravitics. It was as plain as if someone had just been explaining it all to him, even the gravitic principles he'd been hazy on before.

The revelation shocked him so that he moved convulsively, and discovered that his wrists were lashed together.

"He's coming to life," announced still another voice beside him.

The girl went on unheeding: "It's obvious they have a purpose in this, and we'd be crazy if we disregarded it. They cast him adrift with me in the Sheneb's life rocket, close to Earth—and I think he was the one they wanted to be sure got here, and I was just ballast. We've got to wait and see."

"Okay, okay," grumbled the man called Clark. "But I think we're cutting our throats."

Degnan hadn't stirred again; he was slumped between his captors, prey momentarily to a paralyzing horror.

He could imagine what was happening now all over Earth—wherever the Venusians chose to aim their new unstoppable projectiles. Irresistible, yet real and deadly, because the concept of hyperspace as an otherwhere, wholly out of touch with here and now, was false; rather, it was an otherhow. The great calculators of the Earth's defense centers, and the lesser brains of the barrage, could compute trajectories and probabilities in normal space-

time, but the course of a hyperspace missile was utterly unpredictable by normal mathematics. Interception of one of them would be pure lucky accident.

THE CAR stopped. Still blinded, he was pushed roughly out. Even with a hard muzzle thrusting into his back, he had to draw tight rein on the impulse to break away and make a dash for freedom.

He tripped over low steps, heard a door open and smelled close indoor air. The gun prodded him forward a short distance, then Clark's voice behind him ordered, "Turn left."

Degnan sensed that the room was a small one even before someone jerked off the blinder. He found himself facing a beefy redfaced man who stood negligently pointing a heavy gun. Degnan's eyes widened slightly; the gun was a flame pistol, actually a compact, pocket-sized atomic blast, strictly forbidden to civilians.

The room was sparsely furnished with a couple of chairs, a table, and a studio couch; dust of neglect on everything. The single window was shuttered, the ceiling light on, which must mean the power had come back.

Behind Clark's thick figure, Degnan saw the slight one of Margaret Lusk, flanked by his insinuating acquaintance of yesterday and another man, a hollow-eyed, unshaven specimen. The girl's dark gaze rested on Degnan with speculation and, he thought, a touch of compassion.

Clark waggled the flame pistol. "Okay, fellow. She says you've got a command. What is it?"

Degnan was stonily silent. The truth wouldn't do him any good, and he didn't know enough to risk making up a story. If he could learn a little more about what went on-

Clark scowled. "If we're going to find out anything from this dummy, maybe I'd better persuade him to talk."

"You don't really think that would work?" said the girl coldly.

"Never know what a guy'll take until you try him."

"You make me sick," she said, and Degnan had to marvel despite himself at her air of cool superiority. "I don't know why you had to go after him in the first place. Whatever command he carries with him will be set to function in its own time and way, though he may not know what it is himself—and we may be interfering with the Over Race's plans."

Clark's red face grew shades paler; he backed away from the prisoner, the flame gun jittering in his grip in a way that set Degnan's teeth on edge.

"But we can't let him go," mumbled the big man. "Can we?"

The girl shrugged. "No. But we can keep him here, and try to find out—in an intelligent way—what he's supposed to do."

"How?"

She bit her lip, frowning faintly. Her gaze traveled searchingly over Degnan's set face, as if trying to read his thoughts. If she could have done so, she wouldn't have found them pleasant; he was nursing the bittersweet thought of getting his hands on her throat. At the moment, it seemed to him that he hated the girl more than the others, as if her betrayal of humanity had wounded him personally and deeply...

She said with decision, "We'll have to try hypnosis."

The other slaves of Venus stared. Clark grunted suspiciously, "Maybe you know how to do that?"

MARGARET LUSK nodded confidently. "It's the only way to find out what's in a person's subconscious mind—and that's where the Over Race plant their commands." She picked up a handbag from the table and rummaged in it, came out with something that flashed—a small mirror; she explained, "It's not hard. You fix their attention with something bright, and... Well, just keep quiet and I'll show you."

She moved to the studio couch and spent a minute or so carefully adjusting its cushions, then beckoned Degnan to sit down. He obeyed silently, watching her with gathering puzzlement. "That's it. Now lean back. Way back, Relax."

There was an odd tense urgency in her low voice—scarcely the soothing note the hypnotist uses. And the whole show was unutterably phony. Degnan was no expert on hypnotic technique, but he was familiar enough with it to realize that Margaret knew a good deal less than he... Deliberately he kept his expression impassive, leaned back obediently against the cushions, hands still bound behind him.

She was waving the hand-mirror slowly to and fro in front of his eyes, murmuring, "Relax. Sleep. Go to sleep..." She couldn't really imagine that hocus-pocus would work. It might conceivably have had an effect on a very cooperative subject; but anybody knew that to put an unwilling victim under you needed drugs or other drastic aids. Then he noticed from the corner of his eye that the spot of light reflected from the little mirror was dancing erratically on the wall; the hand that held it was trembling.

The others were taken in, though. They watched open-mouthed, with something of superstitious awe—except Clark, maybe; the big man's eyes were narrowed as they rested on the girl. But even he had dropped the heavy flame gun into his jacket pocket.

Margaret's dark eyes held Degnan's, and their bright intense gaze mirrored—pleading? "Go to sleep. You're sinking—down, down—deep into the cushions—"

Degnan's bound hands writhed behind him, while with all his control he strove to remain outwardly immobile. He managed to keep from moving, even when a sharp pain stabbed one of those searching hands. He fumbled further, got hold of the penknife that had been hidden just under the edge of the cushion at his back. It was a little thing, but razor-keen. With infinite care he began working it between his wrists and the thin, tough cord that held them.

Clark scowled darkly and came forward, hulking and purposeful; he grasped Margaret's arm, and Degnan saw her wince. "You're getting nowhere fast," he growled. "I've seen hypnotism acts, and that's not the way—"

She whirled on him in a fury that must have been real. "Now you've done it. I'll have to start over—"

"I don't know." Clark didn't let loose of the girl. "I'm beginning to wonder just what the hell you're up to."

THERE WOULDN'T be a better chance. Degnan came to his feet in a rush whose impetus was behind the long straight punch he aimed at a point below the big man's ear.

Clark had time to start turning his head, and caught it glancingly on the side of the jaw, but it sent him reeling against the wall. And Degnan, without ever stopping moving, had scooped up a chair and clubbed it down on the fellow who had tried to convert him the day before.

The hollow-eyed one was backing to the far end of the room and tugging out a pistol. Degnan sent the chair rocketing at him with the speed and unavoidability of an artillery shell, and swung around to face Clark, who had come dizzily erect and was clawing at his coat pocket. Degnan tackled him and they crashed to the floor together; Degnan applied the ju-jitsu methods that were part of his NAMI training, and an instant later the flame gun was in his hand.

As he scrambled clear of the groaning Clark, he heard Margaret's scream blend with a crash of glass. The hollow-eyed man was backed against the further wall with an automatic in his hand, and he had just dodged a thrown table lamp. Without hesitation and almost without aiming, Degnan pulled the trigger.

The concussion was almost stunning in the little room. The air filled chokingly with smoke, and through it flames climbed with a crackling roar, blanketing one end of the room and already blocking the doorway. Degnan snatched up the other chair, found Margaret with his eyes. He shouted, "The window!" and drove the chair-luckily it was a metal-framed onethrough glass and shutters. Instantly the fire whipped toward the vent created. Degnan caught Margaret's hand; Ьe shouldered his through the window, breaking out the remains of the pane, and drew the girl after him.

The night air was cool and sweet. Behind, the house was burning like a torch; some not too scrupulous builder must have used inflammable plastics in it. "Make sure your clothes haven't caught," said Degnan breathlessly, "and come on!" He gestured toward the back, where a weed-grown garden seemed to lead to an alley.

"Wait!" cried Margaret. "Maxon's car's out front."

"That's ri— No; we haven't got the key."

He saw her smile in the glare of the fire. "I have it. I took it off him while you were fighting the others." "Well, I'll be damned!"

THEY raced round to the front of the burning house. As yet, the noise and blaze didn't seem to have attracted anyone; the nearest dwellings were lightless—perhaps many people had fled the city or taken to their cellars in fear of the hyperspace bombardment, and the police and perhaps the fire department too would be having their hands full tonight.

As he set the car in motion, Degnan said quietly, "Thanks, Margaret. I hope you'll live to know how much this means."

She didn't look at him or answer. Degnan drove slowly for a little while, to avoid being reported fleeing from the scene of the fire; he touched the button that slid back the top of the car, and glanced at the night sky. Overhead, the stars were lost in a murky darkness in which intermittent lightning flickered, weirdly soundless, and once or twice there were long streaks of fire and far thunder. With prescient certainty, Degnan knew that Earth could not long endure the punishment Venus was giving her now... His face grew hard with determination.

He turned onto one of the arterial highways, heading toward the center of the city, and increased speed as much as he dared, until the old car's drive unit whined protest into the whistle of wind.

Margaret said abruptly, "I want you to know—I didn't lead them to you on purpose. They knew where you were, anyway—it was Clark that gave me your address."

Degnan's mouth tightened; he didn't take his eyes off the road. "I still don't get the whole picture. What about these 'commands' of yours?"

This time her gaze was steady and fearless upon him. "It was horrible. I just didn't seem to care. Everything was ugly and useless, and I hated everybody and myself most of all... It wasn't hearing voices or anything like that. I just knew what I had to do, and all the time I knew too that something a long way off was pulling the strings and making me do it... Then, when they slugged you, there in the park, something seemed to go 'pop', and I knew it had lost control."

"For keeps?"

She held her head high, beautiful in a defiance aimed not at Degnan but at the monstrous thing in her memory. "Sometimes I can feel it trying to creep back like a snake, crawling, trying to wrap itself around me..." She shivered. "But I can brush it away. I'm myself now, and I'm going on being myself."

Degnan was silent, wondering: posthypnotic suggestions, then? Her telepathic sensitivity must be way up there, over a hundred on the Bjornsson scale... His own sensitivity was low, he knew, and he hadn't felt anything like that. In his case there were only memory gaps and memories that weren't real. For the first time it occurred to him that his knowledge of the hyperspace principle might be one of those—but he couldn't believe that:

the knowledge was too complete, too logically coherent.

"How'd you come to get mixed up with that gang?"

"I wandered away from the space-port—I didn't know where I was going. Somebody was following me, I think—" Degnan nodded, as if to say "naturally"—"then I met Clark, and he showed me how to lose them, and took me to that house where the others were. They told me I'd left my soul on Venus, and it was true, then. Later on they seemed to be afraid of me, because I knew things they didn't..." She paused, passing a hand across her eyes.

INWARDLY, Degnan cursed the Over Race's science. But outwardly he smiled and said, "You're out from under now. They can make it stick with minds that are off balance already, but they guessed wrong about us."

She gave him a queer, scared look. "I'm free now. But I'm not so sure about you."

"Eh?"

"I told those men I thought you had a command from Venus. I'm still not sure it isn't true."

"If so," said Degnan harshly, "something's gone wrong with their chain of command. They're due for a shock! But if you thought that, why'd you help me get away?"

Margaret's face was in shadow as they passed between lightless rows of houses. "I'm not sure," she said candidly. "I like you, Degnan, and I wanted to help you—but I have a funny impersonal sort of feeling about you, too. As if—you were the most important man in the world."

Degnan smiled tautly. "There your feelings are on the right track. I am."

"What do you mean?"

"That thing that landed east of here tonight—and others like it must be hitting Earth every few minutes. I know what they are and how to stop them, and I've got to make what I know count in time. That's why we're on the way to NAMI headquarters now."

"Oh," was all she said.

He had once more to admire her control. There on the Sheneb he had thought her hysterical; actually she had been sapped by the mental poison the Venusians had administered. Now she was whole again and strong.

"I'm not taking you there," he assured her. "Stop off anywhere you like."

She didn't brighten. "I've nowhere to go; my brother was my only relative," she said tonelessly, and he wondered if she knew the prison ship had been destroyed. "And if any of those men got out of the fire back there—they and the others like them will be after me."

hesitated momentarily. "Now's not a good time to turn yourself in. Everybody'll be scared halfwitted by what's happening and you might get some rough handling. I'm not looking forward to an easy time myself." He came to a quick, illogical decision, assuring himself that what he, and the whole world, owed this girl outweighed the minutes that would be lost. "I've got a room rented for a week in advance and a feeling I won't be using it. There's automatic service: if you don't go out, nobody's likely to even know you're there for a few days. anyway. And when this is over, I'll see you again,"

He knew where he was now, and picked a turnoff from the highway without hesitation. In front of the hotel, he pressed the key and some folded bills into her hand,

then gave her the flame gun he had taken from Clark, and advised curtly: "If the police find you—better give yourself up and hope for the best. But if your ex-playmates come around—give them fair warning, then push off the safety, like this, and let fly. It'll blow the side out of the apartment but don't let that stop you. You ought to be all right if nothing hits Los Angeles—which it won't, if I get through in time."

On impulse he bent to kiss her goodbye. The kiss lasted longer than it was meant to, with the race for the world's life still ahead.

GENERAL Fleming was restlessly on his feet, pacing aimlessly back and forth as if his roomy office had become a prison cell. The shriveled mask of his face no longer hid the very real fear and uncertainty behind it.

A redeyed and unkempt Ralph Degnan sprawled in the General's chair and wished the General would stop talking so he could catch a moment's sleep before the flier was ready. It had been a grinding session in the small hours with the handful of mathematicians and engineers he had finally persuaded them to call in-those men, who had been working without sleep on the problem of the hyperspace projectiles, had been at first wearily impatient, not believing, then at the last they had been wide-awake, firing questions at him faster than he could give the answers that were already clear in his mind.

Fleming said abruptly, "I've had our defense potential concentrated over Los Angeles as long as you're still here. Once you get to Combined Fleet Headquarters, you'll be out of danger—about the only place on Earth they still can't touch. It's been more than six hours now since

they sent over any of those damn things, but no telling when it will start again. God, how I'd like to think they'd used up their supply... Maybe those devils are just getting something new ready. We stopped over half of them during the last hour's bombardment, and deflected most of the rest. But we've fired three months' ammunition in four and a half hours. Our production can't begin to fill the gap. You've got to be right!"

Degnan said nothing. General Fleming worried on: "I can't understand why human operators, working by guess, can stop them oftener than the machines."

"The calculators are logical," said Degnan. "And so is the path of a body in hyperspace. But it's a different logic. That's all 'hyperspace' means—a different set of rules from those that apply to normal space and energy and matter, the rules man's been learning and building machines by for thousands of years. Our robot brains work according to those rules, so they can't determine the trajectory of a hyperspace projectile."

The General shook his head bewilderedly.

"Our physics has been devoted to determining the characteristics of space, which to the Venusian psycho-physicists means the behavior habits of energy and matter," explained Degnan wearily. found that other behavior patterns are possible. The difference is a question of energy levels. When a projectile changes to hyperspace drive, it loses about one kilogram of mass, which means enough energy to shake a planet. That's related to the variation in limiting velocitiesincidentally, we can use this principle to travel faster than light, or the Venusians can, if—" He stopped. The General frowned, grasped at a reality he could understand. "Colonel Degnan—I think I can admit now that you were right about the reason for delay in our offensive."

Degnan smiled faintly. "The big powers were afraid their handsome warships would get dented?"

"Not any more, by heaven! Last word from CFHQ says the delegates took just one quarter of an hour to reach a unanimous decision after the second projectile landed. All fleets made fully available. The offensive is being mounted now—"

A phone on the General's desk buzzed. He snatched it up, listening for a moment without anwering, and turned on Degnan with the receiver in his hand. "On your way! Your clearance has come through and the flier will be ready by the time you're on the field!"

DEGNAN'S memory preserved in photographic, nightmarish detail one glimpse of Los Angeles Spaceport as he skirted the field with his guards.

Far out beyond the girdling fence, four great black warships loomed ready for takeoff and rendezvous with the gathering fleets. Above them the sky was turbulent, murkily luminous; Earth was slowly veiling her face in the smoke and dust of her own destruction, the reek of shattered cities and ruined countrysides.

Between the fence and the field itself, under a glare of floodlights, seethed a mass of people, men and women almost equally mixed. They were the same people Degnan had seen in the streets and parks of the city, walking by twos and laughing unafraid in their security. Now, a confused crying rose over them, a voice of tears and lamentation. Wom-

en clung to their men, summoned this hour to duty, and wept and would not let them go to space and the deadly ships and the horror of airless or flaming death millions of miles from anything. And the men—were leaving wives and sweethearts on a world grown perhaps less safe than the gun-decks of a warship.

Along the fence ranged stiffly a line of robot marines, armored bodies gleaming coldly under the lights, waiting mindlessly for orders from the mustached officer who stood beside them and watched the scene with an air of bleak dissatisfaction.

As Degnan and the two Intelligence agents with him hurried past, the officer turned his back on the crowd. Drops of sweat glistened on his expressionless face as he snapped an order to the motionless machines. The line of seven-foot robots pivoted with inhuman precision and moved on the swarm of humans, against and among them. Their steel arms flashed and thrust, separating those who must go from those who stayed behind, with the efficiency of a mechanical sorter...

One of the men with Degnan muttered something under his breath. The other said, "They ought to stop that. They shouldn't let those women come this far: they go crazy when they see the ships. It's bad for morale."

"Oh, dry up!" said the other.

Degnan said nothing. His dark face was rock-hard as he led them both across the field toward the flier that waited, dwarfed by the vastness of the interplanetary cruisers.

One of his escorts—the one who had said, "Oh, dry up!"—went aboard with him, the other returned to report that they'd got him safely that far.

GLANCING out through the heavy glass of a window, Degnan became aware that, above the artificial lights of the field, the sky was beginning to flush with rose and delicate violet. Not a minute later, when the flier was many miles above the Earth and racing westward, that had become a red and murky dawn, the dust of battle diffusing sunlight and turning itself into the likeness of smoke from hell's furnaces.

Westward, out over the Pacific. Degnan turned to the man beside him, "Where we headed? Asia?"

The agent shrugged; Degnan guessed that he honestly didn't know. Combined Fleet Headquarters was the secret of secrets—Earth's hidden nerve center, housing the top military staffs and the top scientists who could—perhaps—still make use of Degnan's special knowledge in time.

Degnan had firmly intended to sleep through the flight, but a gnawing unrest kept him wide awake now. Deliberately he lit a cigarette; by the time it was smoked down the flier might be over China. He found himself alternately glancing at his watch and staring with smarting eyes out the window, into the flaming cauldron of clouds that brightened as the ship rose higher, then began fading again as its flight outran the sunrise. His imagination did strange things with it, turned it into something terrible, a burning wind and fire that swept over the face of the Earth and left lifeless 'desert behind. The Over Race's final weapon, with which their radio had threatened Earth again last night...

Probably a bluff, he told himself angrily. And why should it occur to him now? He could do nothing that he was not doing already—going at a dozen miles a second to save

Earth from the hyperspace bombardment.

But why the deadly pressure behind his racing thoughts, the cold knot of fear in his stomach, his sense that the sands were running out?

A change of pitch in the high screaming of thin air outside told him the ship was going down, probably slowing as well toward a landing. It rocked and swerved a little. battered by the changing pressures of a too-swift descent, and Degnan glimpsed a vast sweep of ocean, glittering in faint moonlight, unbroken by any land. All at once he remembered that these gravitic fliers could travel under water as well, and he knew where Combined Fleet Headquarters was-under the bottom of the Pacific, below one of the great deeps. The only place on Earth, sheltered under all that cushioning water, that no interplanetary bombardment could reach. There might have been a political motive for the choice of location, too; the oceans had belonged to no nation since the first feeble international laws were set up.

A MINUTE or two left. The roar of riven air grew louder, more ominous—like the whistle of a shell prolonged intolerably, for a lifetime before the explosion thunders, like the scream of a falling bomb—

A bomb was falling, howling and shricking its tuncless death song before it blew itself into nothingness and took with it the whole Earth, everything, everything that had been good and bad and indifferent in the world of man. Its crescendo noise swelled and beat against the confines of Degnan's skull, drowning the one silent sound that he had to hear.

Something in his brain was strug-

gling, beating on a closed and barricaded door, shouting incoherently into the clamor of the descending bomb. Degnan saw only the sweeping second-hand of his watch. He had to understand, to remember before that hand went round once or twice again and it was too late forever and ever.

Something was coming up out of the abyss of darkness and drugged forgetfulness. The gleam of his watch-face transformed itself into the pitiless shining eyes of a great Venusian, eyes cold and burning with knowledge and passionless will.

It was a scientist and a ruler—one of the masters of the Over Race, who would some day be masters of the Universe. As man had foolishly dreamed...

"Forget," it seemed to drone in the travesty of human speech that was the best their voice-converters could make of Venusian speech-sounds. "Forget one minute longer, and the experiment will succeed. Go on. You cannot fail. We cannot fail."

It lied. With a savage effort of will, he wiped the vision out of existence. And as it vanished, the floodgates of memory were opened, and he knew—what Venus had planned, what he had been about to do.

As Degnan's sight cleared, he found himself on his feet, swaying like a drunken man. Before him danced a face, that of his escort, whom he must have pushed aside as he stood up—a shocked stare, dawning suspicion: "What's the matter with you?"

Degnan faltered only a moment. With merciless clarity he realized the impossibility of explaining to this man, or any other, in the time that was left; with regret, but with brutal purposefulness, he hit the agent on the point of the jaw and

saw the man fall down limply.

The pilot had still less warning. Degnan struck one skillful, chopping blow and snatched at the control bar; through the nose window he saw the steely glint of waves sliding swiftly nearer, and yanked. He felt nothing, of course, through the full-gravity-thrust drive. But now there was only the night sky in the window, and he knew the flier was climbing almost vertically. Only then did he heave the half-stunned pilot out of his seat and into the aisle of the passenger compartment.

HE SANK into the seat, breathing hard, momentarily incapable of further thought or action. Through timeless intervals, the sky's turbid darkness gave place to a hard, crystal-clear blackness, and in it the stars came out and shone with unwinking brilliance. On the control panel an alarm buzzed stridently and a red light winked on and off. That meant the flier was approaching the danger limit for unshielded atmospheric craft, radiation in the space around it becoming dangerous to life. Still, it was a while before Degnan stirred to shift the controls and drop Earthward again.

He leveled out in the stratosphere, recovering from shock and beginning to think furiously. There was no hiding here, high up in air; within minutes, at most, an alarm would be out and radar tracers searching for the flier. Overpowering the other, seizing the ship had been an almost instinctive reaction of self-preservation; it made no real difference in his position. He was outlawed anyway, exiled from Earth now and forever by the strangest and most terrible fate a man had ever suffered.

Behind him someone groaned, be-

ginning to come to. Almost without looking around, Degnan slammed and locked the door of the pilot's compartment. Clinging desperately to sanity, he tried to form a plan.

He knew now the nature of the Venusians' final weapon. He was that weapon.

Every atom of his body, every particle of flesh and blood and bone was a grain of explosive waiting for the flash of a detonator.

Earthmen had known, without thoroughly understanding, that Over Race's science could convert any inorganic substance into fissionable material without changing its overt physical or chemical properties; for that reason, import of articles from Venus had been rigorously supervised. They had not known, the enemy had carefully kept them from finding out, that the same thing could be done with living matter. The Venusian liberation of nuclear energy was inferior, in ergs returned for ergs invested, to Earth's use of the power metals—but it had the one decisive advantage in war, that a Venusian atomic bomb could take any form, even that of a living, breathing man. The one form in which it would surely pass Earth's defenses and find its way-

Degnan remembered what the detonating impulse was to have been. A simple and thoroughly Venusian device. His arrival—his own realization that he had arrived—at CFHQ would have been the trigger.

Mass times the velocity of light squared—he tried briefly to calculate the force of explosion, and recoiled from the figures that suggested themselves. At the very least, Earth's vital center would have vanished into dust together with cubic miles of the planet's surface.



He braked the flier swiftly and swooped low over the mysterious surface . . .

به در است

> HE COULDN'T go back. If he were taken to CFHQ, even his conscious knowledge of what was to come would not check the automatic reaction. Even his lifeless body must not return to Earth. It was that thought, largely, that had kept him from heading the flier on into space and the burning bath of radiation; the defense patrol would intercept it and bring him back, alive or dead. He couldn't imagine that there was any alternative way of setting off the explosion, any control that could reach across space from Venus-but the danger was too great for any chance to be taken.

> Also, he was not the kind of man to display suicidal courage until every other kind of courage had failed.

The Venusians had known him well, he realized sickly, when they had chosen him. They had planned every step ahead, foreseen everything, when they had arranged his "escape" from the Sheneb, his return to Earth with the knowledge they had deliberately planted in his mind, knowledge important enough to make sure he would be sent to CFHQlatent, triggered into consciousness by the fall of the first hyperspace projectile. Perhaps they had even made sure to see that he would be in the open to see that by inspiring Margaret Lusk to make a date with him in the park; at all events, her call had been a psychological primer, to put him in a receptive mood. His capture by the Venusians' slaves, to be sure, had been a crossup in their schemeit showed, what might be important, that they didn't have direct mental control over the humans they had worked on-but it had made little difference. They had known he would get through; they had chosen their instrument with perfect understanding of human psychology... But, no: their plan had failed at the last mement, when the mental blocks they had used on Degnan had gone down by a miracle he was still too dazed to question. There was still room to hope.

Drenched in cold sweat, Degnan stared at the gleaming dials and knobs before him, the paling sky beyond the nose of the flier. He had headed it mechanically back the way it had come, toward the North American coast. And now an idea began to glimmer... He would be risking not only his own life—forfeit already!—but many others besides; yet on the other hand... Convulsively he leaned forward and spun the power rheostat as far as it would go.

The line of shore was featureless in the light of a gray dawn, encroaching on the oily darkness of the sea. Degnan braked the flier swiftly and swooped lower, finding partial orientation by the lights that still shone sickly here and there, where Los Angeles sprawled to southward.

At last he located the little bay he knew. Rummaging hastily in a storage compartment, he found the automatic pistol stowed there as per some ancient regulation having to do with mutiny on shipboard; he thrust it into a trousers pocket. He cast his coat aside, and dropped the flier still lower. When it drifted at a bare twenty miles an hour only a few feet above still deep water not far offshore, he flung open the emergency door, took a deep breath and in the same motion pulled back on the control bar and leaped clear.

WHEN HE broke the surface, striking out for the beach, he dashed the water from his eyes and saw the flier already far away, climbing and vanishing into the gray-rose sky. The farther it traveled before it was picked up, the less help it would be to the men who shortly would be combing the planet to find him.

If they could know not only where he was but what he was—there would probably be a mass exodus from Los Angeles right now. He reflected grimly that, if the worst were realized, if there were an open switch on Venus that would be closed when the enemy grew tired of waiting, Los Angeles would get it whether he was there or not. He had stayed there two days—and a nail-paring of his, a stray hair from his head, would be enough to level city blocks.

He splashed ashore and broke into a jogging run that, weary as he was, he could keep up for the short distance he had to go.

As he ran, the Earth seemed to groan beneath his steps with a premonition of catastrophe.

He couldn't go to the authorities again; with horrible vividness he pictured himself trying to explain to them, being called crazy and shipped back, a prisoner, drugged perhaps, to CFHQ so the scientists there could pick his brains. But he had to have help, and he was going to the only place on Earth where help might be.

The wide white house came into sight as he rounded a bend in the beach road. Built in the rambling California style, among pruned green gardens on a rise of ground, it had a view of the sea from its flat roof—the roof where, on a warm night with a great moon silvering the Pacific, he had got engaged to Athalie, once in a world that was far away and unreal. Tonight, if tonight ever came, there would be no moon.

But Athalie was there. He found her—having flung open the unlocked door and plunged inside without ceremony, in a sudden fear lest the house be as deserted as it looked—in the spacious living room; she was huddled in a big chair, against the wall opposite the great windows that looked eastward across the dunes, staring out at the brightening sunrise.

She didn't seem to see him standing in the doorway. He called hoarsely, "Athalie!"

The girl raised her head, saw him, and sprang to her feet in a quick scared motion. She took a recoiling step.

"It's me. Ralph." He came toward her, and she did not retreat again, but her gaze on him was feverish and blank. There were sleepless shadows under her eyes, her bright hair was unkempt, her makeup smudged, some of her fingernails broken and untrimmed. Half-consciously Degnan noted those details and could not understand, until he remembered that she, like all Earth, had gone through the night of terror, the hours of the hyperspace bombardment. He hesitated. "Is your father here?"

She shook her head, said painfully, "He went with the Fleet. He had a reserve commission, and he got them to take him. He went on one of the battleships—I don't remember which one."

DEGNAN was prey to a sinking feeling. He would greatly have preferred, just now, to talk to Charles Norton, who was his friend and whose combination of hardheadedness and imagination he respected... But Athalie would have to do. Certainly the quarrel they'd had counted for less than nothing now.

He said with an uncontrollably pounding heart, "And your father's yacht—did it go out with the Fleet?" "No. The guns weren't ready, or something. What do you want?" she demanded uncomprehendingly.

"I want that ship," said Degnan, and the way he said it made her take another backward step. Her lips moved and relaxed without framing a question. "It's still on his field? Guarded?" She nodded, finally got out, "Why?"

He ignored the query. His whole being was centered on the need to get that ship—perhaps the only spacegoing vessel left on Earth now which had a full-gravitic drive, which might carry him through Earth's defense and out of reach... "Listen. They'll let you in to look at the ship, won't they? And maybe me with you. You've got to help me get to the Azor's controls."

She went on staring at him; then a spark of the old strong-willed Atha-He flared up. "You must be crazy! Where have you been? What's happened? What can you possibly—"

He took a deep breath, realizing the strange figure he must be—drenched from head to foot, haggard the awful burden he carried showing in his face. "I want to go to Venus," he said, and regretted it the same moment; now he would have to explain, and he had hoped to get Athalie's help without that.

"Now I know you're crazy. Venus! Nobody can go to Venus. The Venusians are coming here..." She broke; her body shook with sobs, but her eyes were dry and over-bright.

He might have tried to comfort her, but somehow the strength wasn't in him. He stood gazing down at her, and in terse sentences, jealous of the time that was trickling through his fingers—in a toneless voice, as one telling a story already grown old, he related what had happened since yesterday evening; told her why he must go to Venus, or failing that at least leave Earth, if he died in the attempt.

She quieted, and as he finished, shrank back against the wall, pressing her hands against it. His eyes bored into her, seeking; but he could not tell whether she believed or not.

AFTER A silence that was not long, but seemed so, Athalie said, "But even if it's true—it doesn't make any difference. Everything's over anyway. We—Earth is going to surrender."

"The hell you say!"

She nodded abstractedly, as if he had agreed. "It was on the radio a few minutes ago. A message from Venus: if we don't surrender, they'll start the bombardment again at one o'clock. We couldn't stand it—you see that, don't you? They broadcast the message, because the censorship is down—we've all got to make up our minds now. And the Nations' delegates are meeting to decide."

The world seemed to rock around Degnan. He muttered hoarsely, "The Fleets..."

"They can't win. The radio didn't say that, of course—but everybody knows it's hopeless." She straightened suddenly and grasped at his arm with nervous strength, her manner fevered again. "Ralph! The Venusians have promised to let some people go, to live on Mars. They'll let us go if they think we're on their side. Help me think, Ralph—how can we make them understand we're in favor of surrendering?"

For a moment Degnan felt hollow, sick and weak inside; he realized how tired he was... He set his teeth and caught Athalie by both shoulders in a grip that made her cry out sharply. "That's enough of that!

Mankind isn't ready to quit yet. And you—you'll do one last thing for your own world before you start bowing and scraping to Venus!"

Athalie had wilted. He felt her trembling, knew it was fear of him and did not relent. Nothing mattered now except his purpose.

There was a half-mad light in the eyes that met his—or perhaps they only reflected his own. She faltered, "Don't, don't—I will."

He let her go, feeling at last a touch of pity for her. Last night had shattered her brittle self-confidence, left her subject to only one motive: fear.

He ordered, "Take me to the Azor."

It was Degnan who took the wheel of Athalie's sky-blue speedster and pushed it at savage speed over the road that wound along the shore. But as Charles Norton's one-time private landing field came in sight, he slowed and flung at the girl:

"I'll be an engineer friend of yours, who wants to see—informally—if the ship mightn't be usable after all. I can talk some technical language, and you vouch for me... At least they'll be thrown off guard."

There had been a low fence around the field when he had seen it last; the military had heightened that and topped it with harbed wire. One gate was closed and barricaded; beside the other one, a flimsily-built guardhouse. And beyond the fence—the Azor, its once golden hull painted space-black, a spidery temporary scaffolding about it. Work was evidently at a standstill now. They wouldn't have touched the engines, though; and even if the ship weren't sealable he could fly it in a vacuum suit.

HE WAS WELL aware that he had no chance of getting to Venus alive. But he knew the Azor

of old, knew what its powerful drivers would do; there would be an excellent chance of shooting past the units of Earth's defense patrol that had not been drawn off by the offensive, into deep space, and once out there-set a collision course for Venus and give the engines full power. By the time the fuel was exhausted, the ship would have a velocitw of over five thousand miles a second. Even if it were blasted to fragments when it hit the Venusians' barrage, the fragments would still have the momentum of its two thousand tons.

And if that death plunge should carry him close enough to the enemy world— There was a question which, when it first occurred to him, he had hastily crammed back into the darkest recess of his mind; he brought it into the light now. If he were to think, with deliberate conviction: I am at Combined Fleet Headquarters—now!— would that thought set off the reaction, before the brain censor could label it a lie?

He set the brakes in front of the gateway and reached for the door-button, eyes still fixed hungrily on the space ship. Then a scuffing sound jerked his head around—and he saw the car's other door already open, and Athalie outside, running, stumbling across the sand toward the guardhouse, crying shrilly, "Help! Help! There's a crazy man out here!"

For only an instant, Degnan sat stunned. The thought streaked through his head: I should never have looked away. If I'd only kept my eyes on her she'd never have dared— But there was no time for regrets. A uniformed figure had appeared at the door of the guard-shack, and the sun flashed on metal in its hands.

Degnan slammed full power into the drive unit and spun the wheel; the car whipped round with violence that almost blacked him out. There was on one way to go and that was back, a quarter mile of naked shore before the road dipped from sight, and he took that road at a hundred, a hundred and fifty miles an hour, tires screaming on the curves. He thought he heard a shout behind: but he was counting on the fellow not shooting before he found out what was up. For a wild moment, he had thought of crashing the fence; but then the guard would certainly have opened fire.

The rising ground hid him, and he released held breath. But he didn't slacken the deadly pace for half a mile more; then, within sight of the Norton house, he swung the car off the road, careening into the ditch where it would be partly shielded from aerial view by a couple of scrubby pines, and sprang out. His weary muscles responded poorly, but he drove himself into a dogged run—inland, toward the city.

Within minutes the hunt would be up—on the ground, in the sky, many against one, and sometime the lone quarry must stop, rest, while the ring closed in...

Skirting a tree-hordered road, he slowed at last to a walk. The road and the air above seemed deserted, but he kept under cover of the trees. Ahead, the sun climbed higher—a weird sun, a white disk through the high pall of dust that hung over the Earth.

SOMETIME later, he was in an outlying business center; normally its streets would have already been crowded at this hour, but today there were few people, and those hung in

knots on the street-corner or crept aimlessly about, glancing up in furtive fear at the pallid sky. Among them, Degnan's bedragglement and his haggard look was not conspicuous; his clothes had finished drying as he ran, and he had halted briefly to brush away the incrusted salt. He breathed more deeply; by losing himself among Los Angeles' millions, he would at least gain a little time.

Much further on, in a little park, he crept beneath a dense thicket of bushes to rest. The leaves sagged tiredly under a film of sooty dust, and as the day wore on it was growing crushingly hot, as before a thunderstorm. At one o'clock—

With continuing effort Degnan held himself just above the edge of sleep, letting his body rest while his mind stayed feverishly awake. Could he ever sleep again? For he might dream- An hour or more by the white sun he lay there-his watch had stopped since his plunge into the sea-and at the end of that time got stiffly to his feet and went on. Aimlessly now, for there was no use trying to put more distance between himself and the point where he had last been seen-the point around which they would have drawn a circle, within which he must be. Perhaps they already knew, by a process of elimination, that he had gone into the city.

He knew now that no one on Earth would believe his story. Athalie... She had not believed—not that it would have made any difference; she was too far gone in hysteria. She hadn't even been scheming to get him caught, back there; she had only been running away.

Here and there on the streets he saw pairs and groups of new citizen militia, grim-faced, with arm-bands and rifles, often accompanied by regular police robots. The night just past must have created a problem of order the regular forces couldn't handle; there would be many who, like Athalie, had lost their heads completely, and their panic could take unpleasant forms. Human civilization had been shaken to its roots. And over every effort to hold it upright now lay the shadow—the new Venusian ultimatum.

Somewhere on Earth, out there under the Pacific, no doubt, the United Nations' delegates were meeting under that shadow. And in each of them—the poisonous thought: "They've promised to spare a few. If one should speak out now for surrender—"

Those men would surely reject such a motive with revulsion. But there was another, more insidious thought: "Man's time has come, to go the common way of a million other species, of the dodo and the tyrannosaur—outclassed and replaced. What use to struggle against a higher life form?"

IN ALL THE millennia of his blundering, bloody history, man had achieved no more than the vision of detached intelligence, emancipated from the blind compelling forces that rose constantly out of his unconscious to mock him with apehood. The unconscious is the larger part of Homo sapiens' mind; there had been dreams of a Homo superior to come some day... But the Over Race had such intelligence now.

Some Earthly psychologists had claimed—and the Venusians had never denied—that the brain of the Over Being was actually inferior, in absolute potential, to the human. But their potential intelligence was one hundred per cent realized and unin-

hibited by feelings; it wasn't that they lacked emotional drives, but their emotions were on the conscious level, the intellect dominant.

The history of Venus was relatively short, as the Over Race was a recent mutation of their lesser kin whose psychic structure resembled that of men. But that history was one single purposefully rising curve. without the waverings and cyclic reversions of man's past; on Venus there had been no dark ages, no great divisions and wars. In the absence of the factors which had made introspection a hissing and a byword among Earthly psychological methods, the science of mind had led technical achievement—but that too had advanced on the rising curve. That the first ships to cross space had been Terrestrial was perhaps only an accident; under their cloud blanket the Venusians had had little idea of astronomy, no direct knowledge of stars and planets.

That was a basic environmental difference. Through all his wanderings and dark ages, man had seen the stars overhead, and dreamed dreams; he had been at last almost ready to reach out for the stars...

That was the last and greatest prize at stake in this last war: the right to fulfill that human dream. Only for the Venusians, if they won, it would be no such fulfillment, but only another episode in the smooth mechanical functioning of their total intelligence.

Yet, for all their superiority, they had made one basic mistake in the field where they were strongest; Degnan, on whom the error had been made, could recognize it now. They had wholly misunderstood the duality of the human mind, supposed that knowledge erased from the conscious would no longer affect the

subject's metives or actions. But human psychologists, who had fumbled at the gates of the unconscious for centuries, knew that to it belonged the complex of blind forces which the old theologians had called "conscience", and to which various names had been given since Freud's pioneer hypotheses; by any name it was the same, a power greater in the end than merely conscious reason or will. The Over Race could not be expected to see that; their mentality was by definition conscience-less...

THE SIGHT of a squad of armed militiamen jarred Degnan out of a sleep-walking bemusement and made him step quickly into the doorway of a cafe, to busy himself holding matches to a waterlogged cigarette. The cafe was open, and he glimpsed a lighted television screen inside; he realized then two of his own most immediate problems—he must eat if he were to have the strength to keep going, and he must know whether a general alarm had gone out for him.

In the latter he was almost incredibly lucky. He had scarcely collected a hasty meal and sat down inconspicuously in a corner—fortunately the cafe was an automat—when the screen blazed with an announcement, at once printed and spoken for extra emphasis:

"The persons whose pictures will be shown immediately following are slaves of Venus and traitors to Earth. They are believed to be somewhere in this city. All citizens are requested to watch for them and assist in their capture dead or alive."

A series of over a dozen pictures, with names, ages, other data, displayed for a minute or two apiece. Among them Degnan recognized the red-faced Clark; and last in the

series was Margaret Lusk. Degnan's heart contracted strangely as her image filled the screen; it was a moving picture, breathtakingly real, and it must have been taken some time ago, before she had gone to Venus, for in it she was smiling with a carefree gayety he had never seen in the brief time he had known her, and in the background were glimpses of a summer landscape of Earth...

Then a repetition of the announcement. "The persons whose pictures have just been shown... Dead or alive!"

Degnan bitterly regretted not having advised the girl to go straight to the police. But everything had seemed so simple then. Now—it wasn't likely to make any difference to her, or anybody else, before long, anyway.

The important thing was that they hadn't broadcast his picture. Perhaps that meant they still hadn't come to a decision about what was behind his disappearance; certainly, at least, it meant they wanted him alive.

If they caught him, it wouldn't be alive. It was as good as certain now that his dead body would be harmless, that the only trigger was a perceptive reaction in his living brain. By now the Venusians, as their new ultimatum showed, had written their "final weapon" off the books and were going on to victory without it.

Degnan froze; the telescreen now showed a news-announcer, and "the Fleets" had come crashing into his consciousness.

THE ANNOUNCER'S face had an ill-hidden strained, hunted look.

"...that military operations which began around Venus at eight o'clock Pacific Time had practically ceased. Some units of the Combined Fleets,

including a number of cruisers and lighter craft, were reported regrouping between Venus and the Sun, with a good chance of returning safely to Earth. The two battleships, San Ch'ieh and Yucatan, previously thought to have escaped the Venusian barrage, are now definitely known to have been lost..."

Mechanically, Degnan glanced at the clock beside the telescreen. It was eleven o'clock; three hours since the Fleets had contacted the enemy.

And it was evident that the Fleets had been destroyed. At the moment he didn't even care much about learning the details; he only half listened as the announcer went on, in a taut unnatural voice, briefly reviewing the disastrous Battle of Venus. Little enough was known-only that the Over Race had produced some new and frightful wizardry, that Earth ships had exploded and disintegrated in apparently clear space still a quarter of a million miles from the enemy world, attacked by something which neither ordinary equipment nor that hastily rigged up to cope with hyperspace missiles could detect or fend off. With what he alone knew, Degnan could guess at the nature of that attack. A variation on the hyperspace principle, pulsating fields projected by devices too small to register on detectors until it was too late; the ships must have torn themselves apart as portions of their structures ceased to obey the same physical laws as the

Within those three hours the last of the great battleships, Earth's pride and power, were dead. One of those ships, given ten minutes inside the enemy's defenses, could have reduced the part of Venus inhabited by the Over Race to something resembling the surface of the Moon; but they had never had a chance to get that

near, had never, after the first contact, had even a chance to win free again.

With a shrinking foreboding, Degnan glanced round him, covertly studying the faces of the other people in the cafe. In them he did not find the shock and unwillingness to believe that he felt himself-but then these people had, no doubt, heard earlier reports and had time to grow familiar with catastrophe. He did see an ominous blankness, a helpless, hopeless fixity in the eves that watched the screen, that might mean resigned despair-might mean the end. If people like these, a couple of billion of them in all the lands of Earth, were ready to give up, it would be their decision that counted. The delegates' votes would be cast according to what the observers in their various countries reported on the state of mass feeling, on the results of hurried surveys, the resolutions of local political organizations... It was obvious that, as Athalie had said, the censorship had been removed, complete freedom of information restored; that at least was a heroic gesture in what might be man's last hour.

pegnan compelled himself to finish eating and drinking, and went into the streets again, under the veiled noenday sun. He had to keep going—the more nearly he was approaching the end of his strength, the more surely he had to keep moving; if he stopped for long, he might sleep, and sleeping be captured. But as long as he was awake and in command of himself—Degnan's hand tightened on the pistol that reposed in his pocket.

He wasn't much worried about the militia now, and was sure he had nothing to fear from the bulk of the people he passed, or who passed him by—merely wandering aimlessly, like him, or going mechanically about business that no longer mattered. He wondered what they would do, if they knew what walked among them—run screaming for non-existent safety, or merely stand rooted in a numbness beyond fear?

The pale sun had passed the zenith; the air hung dusty, hot and heavy as the air before a storm, unshaken in the abnormal silence that lay over the city. But in that silence Degnan heard suddenly an explosion of voices, a murmur that rose and swelled with bursting tension. He saw a cluster of people on the street-corner ahead. They pressed round a news-vending machine; sheets fluttered, were snatched and torn as the crowd jostled and grew.

Degnan sensed that the storm had already broken. Careless for the moment of attracting attention, he grasped an arm on the outskirts of the mob: "What's up?"

The man turned with an unseeing stare, then gestured at a paper that was held briefly aloft by someone, its headline vivid:

UN REJECTS VENUS DEMAND

Somehow he was a couple of blocks further on, hearing the same story from a public newsscreen. Ten minutes ago the Nations' delegates had voted unanimously against surrender; perhaps their decision had been made much earlier, but they had delayed, gaining time.

The crowd collected in front of the screen blocked the street, but even now, after the first stirring, they were surprisingly quiet. Most of them wore the same still, set expression that Degnan had seen and tried to analyze before, but now, looking from one to the other, he saw those faces with new eyes, Resigned they were—resigned to suffer and die if it must be, without shouting and fanfares, but not to yield.

And in him rose a feeling long unfamiliar—a sweet and poignant sense of pride in his own kind. If man were about to pass into extinction, he would not go like the dodos that bowed their heads under the clubs, but as the last tyrannosaur or the last sabertoothed tiger must have perished—fighting.

DEGNAN felt clearheaded once more, stronger; it was as if a part of his burden and weariness had been taken from him. The spirit of Earth's peoples, expressed in that unanimous vote—even if their unity should mean no more now than that of the Five Nations of the Iroquois or of Sitting Bull's confederacy had meant against the white man's rifles—was something to remember to the very end.

Someone in the crowd shouted, loud above the rustle of voices, and pointed into the sky; and many, Degnan among them, looked up in time to see a great ball of fire that fell through the overcast, seemed for a moment striking at the city, then veered away and vanished into the west.

The voices blended in a long sigh. The torment had begun again, and this time there would be no reprieve... Presently there were other flashes in the clouds, moanings and whistlings far up in air, the hurtling fire-trails of last-ditch interception missiles rising from Earth itself. With what the defenders had learned and the preparations that must have been made in over twelve hours' respite, it should be possible, for a time, to destroy most of the enemy projectiles or at least deflect them away from the great population centers; it might even be days before the

world's defensive stores were exhausted. But it would be folly to hope that the Over Race was not ready to carry on the bombardment that long, for as long as they needed to.

Degnan stood motionless, face upturned like the rest; but inside him was a sudden turmoil. It was as if the sight of that first fireball had tripped a spring in his head, even as a similar spectacle had last night—but then the spring had been set by Venus. This time was different; there was no flash of memory lighting up the dark places of his mind, but facts he knew long since were falling into place with swift precision.

Abruptly he whirled, pushed his way ruthlessly out of the crowd and began to run.

He pounded through deserted streets and past other skyward-staring groups clustered round the news centers, while above the lightning flickered, up there where the Battle of Earth was being fought. He no longer saw it. Before him danced images from memory, and most constant among them was the vision of Margaret-a queerly superimposed picture, that, of her face as he had seen it last in reality, shadowed by horror past, and as she looked at him from the screen, smiling unafraid in a world that was gone. And in his ears was the echo of words she had spoken last night.

And there was a mathematical certainty. The end of the first hyperspace bombardment had come shortly before midnight—bare minutes after Degnan had arrived at NAMI head-quarters. For some six hours, then, the Venusians had held their fire without explanation.

To Degnan the reason was clear. They had discontinued the assault lest it interfere with the functioning of their final weapon. Forced at last to assume that something had gone wrong, they had sent the ultimatum, allowing another quarter-day for its acceptance, during which Degnan might still conceivably accomplish their plan. And now at last they had given him up...

But they could not have known what time he got to the NAMI office. No matter how uncanny their ability to foresee probabilities—and they had shown it amply in the scheme they had built around him—they couldn't have calculated that closely, if for no other reason than that his involvement with their own agents would have upset all timetables.

Unless-

Margaret saying: "Sometimes I can feel it trying to creep back..."

If that had been a post-hypnotic effect, it meant nothing. But if it were what she had seemed to think it was, if she had been—possessed—by an alien mind millions of miles away, on Venus—then the Venusians could have known through her. It seemed impossible, but it made the picture complete. Degnan had judged her telepathically sensitive; and now he could guess, for the first time, why she had been returned to Earth with him.

And she had helped him escape—why? Degnan winced. But it didn't matter. What mattered now was to find her, use her in one last attempt...

AS DEGNAN ran, there settled on his shoulders a new burden of responsibility, and that which he had had to bear before seemed light. For he was about to take the fate of worlds deliberately into his own hands.

Pounding heart and straining lungs told him he couldn't keep up this pace much longer—and there

must be miles to go; he was still only roughly oriented in the unfamiliar section of the city to which his wanderings had led him. Grudgingly, he slowed to a rapid walk. Public transportation seemed to have vanished, and there were very few vehicles of any kind moving; Degnan glanced wistfully at the occasional parked cars, but to appropriate one would take time and tools he didn't have.

Ahead of him walls and windows were suddenly lit by a flash far brighter than the murky day. He looked back into the west, and saw there a cloud rising, an immense inverted cone of steam and spray, losing shape as the fire within it faded, dwarfing all the city's buildings. A hyperspace projectile had barely missed and had fallen into the ocean.

Moments later the ground jarred and shook with a force that flung Degnan to the pavement. He heard the tinkle of shattering glass and from somewhere the prolonged roar of collapsing structures. Dust and plaster fell from overhead. He scrambled to his feet and broke into a run again.

Three quarters of an hour later, spent from haste and from struggling through streets half-blocked with rubble, he reached his goal.

The small hotel looked deserted, though it was practically undamaged, having lost no more than a few windows. Degnan panted up the stairs—and paused in dismay; the door of the room where he had told Margaret to stay stood ajar.

As by its own will, his hand dipped into his pocket and came out with the pistol, slipped off the safety catch. Dead silence all around. He pushed the door wide with an abrupt motion, and looked into an empty room, almost as he had seen it last.

A picture hanging askew, a lamp toppled—but that was no doubt caused by the temblors just past. Intuitively be knew she was gone, and at the same time his mind refused stupidly to grasp the possibility—gone without leaving any word? Or taken away?

Then a scuffing sound from behind warned him; he spun and recoiled inside the room, catching a flashing glimpse of the half-dozen men in police uniforms and civilian clothes who had appeared almost soundlessly. Degnan heaved a table against the door just as a crashing impact sprung the latch. A second blow jarred the heavy table back a couple of inches. Then Degnan took aim at the door, just above head level, and fired.

A sound of hasty steps and silence again, broken only by a mutter of voices in which he could catch no words.

He was in the bag. The room was on the third floor, and even so there'd 'be others posted around. This was the end...

HAT'S THE matter, Ralph? Can't we talk this over?"

Jay Marlin's voice from the hall outside. Degnan shifted his grip on the pistol butt, grown slippery in his hand. He answered in a flat voice, "No. I'm afraid not, Jay."

"Listen—we've got plenty of guns and gas out here, but we don't want to use either one. There are some who think the Venusians got to you, Ralph; but I don't believe it, I don't believe you'd turn against us. Whatever's happened, it can't be as important right now as a defense against the bombardment. And you're the only man that can give us that, the only man that can save Earth!"

How close that was to the truth and yet how grotesquely far away! He was not Earth's salvation but its greatest danger. Try to explain that? He remembered Athalie's unbelief and treachery. The chance was too great, the danger too monstrous. And yet—

He was silent, trying for a moment to put everything else out of his mind and look sanely, objectively at the thought that had come to him, trying to be sure it was not just that he was cracking up, his personal urge to cling to life getting the upper hand and urging him to grasp at a hope that was not there.

He said from a dry throat, "There was a girl here—"

"She's all right. We picked her up early this morning."

So Margaret had already been in their hands when her picture was broadcast. They would have suspected he might come back here, sent out the picture in hopes of increasing the probability. And they had guessed right, without knowing all that was at stake.

"Jay."
"Yes?"

"Maybe we can make a bargain."
"Name it!"

"I've got to have a solemn promise. Let me talk to that girl for a little while—half an hour. It doesn't have to be alone, just undisturbed. At the end of that time, I'll go quietly to CFHQ, unless—and you've got to promise me that, too—unless by then the bombardment has stopped."

There was a brief pause; then Jay Marlin said, "My word on that wouldn't do you much good. I'll have to call headquarters; that'll take a couple of minutes. These other men will stay right where they are. All right?"

"All right," said Degnan. He didn't move, but stood facing the door, the automatic in his hand.

After a lifetime, the other was

there again. "Ralph—it's okay. I talked to General Fleming himself. He promises you'll be given what you ask."

Degan let the gun fall; it thudded dully on the carpet. He pushed his barricade aside and let the door swing open.

IN THE anteroom of Fleming's office, Jay Marlin pressed his hand. "Good luck. I don't know what you're trying to do, Ralph—but good luck anyway." He wheeled sharply, and went out before Degnan could manage so much as "Thanks."

There, thought Degnan, went a man who would have believed him.

Other NAMI agents accompanied Degnan into the office. The General was waiting, looking older than he had last night; with him was a youngish man with a smooth face and Mongoloid eyes.

"This is Mr. King," General Fleming waved a hand jerkily, "liaison deputy from Combined Fleet Head-quarters. By his permission, we shan't have located you—officially—until thirty minutes from now."

King nodded, glanced silently at an expensive wrist watch.

Degnan hardy gave either of them a second look. He had eyes only for Margaret Lusk.

She was in a chair beside the General's big desk, and she looked very small and dejected. But at sight of Degnan she sprang to her feet with a tremulous glad cry.

"Ralph, Ralph!" She flung her arms about his neck, "They told me you'd disappeared—and I thought—"

"Easy," he said softly. "Things haven't gone just the way I figured, Margaret. I need your help again."

She raised her head and looked into his face clear-eyed. "Tell me how."

He couldn't believe, now, the dark suspicions that had burgeoned again not long ago—and that made what he had to ask harder. He steeled himself.

"Remember what you told me last night? About the thing that kept trying to creep back. Is it still trying?" A shadow of pain crossed the face close to his; she closed her eyes as if to shut something out.

"I think so-I'm afraid-"

"Stop being afraid—and let it come back, have control again just for a little while. You've built up a defense against it—you've got to tear the wall down now. It's the only thing that will help—and you're the only one that can do it." He was at once commanding and pleading.

She shuddered, then was quiet; but he could feel the effort she was making, the tenseness of her body. "I— I'll try."

GENTLY he seated her in the chair. She looked up at him for a long moment, then leaned back. After a little she closed her eyes, and he saw a wave of revulsion pass over her face. Her hands clenched in her lap and then slowly, deliberately unclasped. Her eyes stayed shut and she was still.

Degnan had to know how fast his time was passing. He glanced round and saw no clock, but his eye lit on King; he made a peremptory beckoning motion and pointed to his own wrist. The other man's slanted eyes read the gesture; face impassive, he unfastened his watch and handed it over.

Five, six minutes gone. "Margaret!"

Her eyes opened and stared; they were blank, blind, as they had been when he first looked into them on the Sheneb.

Degnan spoke to her, to the thing behind her eyes, slowly and distinctly. "I have twenty-four minutes left. When that time is up, unless by then hyperspace bombardment has ceased and Venus is ready to surrender, I will be sent to Combined Fleet Headquarters. The Headquarters is located at the bottom of the Pacific Ocean." Out of the corner of his eye he saw the General and the lisison agent start and look at one another. He went on steadily, "Earth's oceans are water, hydrogen oxide. Their total mass is in the neighborhood of one and one-half quintillion tons, of which about one-tenth is hydrogen. One gram of hydrogen. converted into helium, yields seventeen hundred billion calories of heat . . . "

He added a few more rough calculations. The enemy could check and reduce them to exactitude in next to no time—if the message were heard, if the thing in Margaret's eye was not only here, in her mind, but also there, forty million miles away...

If they heard, and if they believed, it would take them time to decide—though far less time than men would have needed—and again time for radio signals to halt the hyperspace projectiles that were on their way to Earth now. And how long might it take for a thought to cross space? The speed of light—or less, or more? There was no way of knowing. The hands of King's watch moved at abnormal speed, as if the mechanism were running mad.

Degnan began again, repeated the message almost word for word, with slow deadly emphasis. It was as if his naked will strained to bridge the gulf of nothing and make contact with the enemy.

Venusians were not men. No man quite knew how they would respond to a given situation. He was offering them, now, the choice they had hurled at Earth: surrender or die. The people of Earth were willing to accept death before defeat. But the Over Race was coldly logical, and Degnan felt sure that it would not respond as man had done...

THERE was silence when he finished. And in the stillness the faint tintinnabulation of small objects in the room, responding to the Earth's ceaseless vibration beneath the onslaught it was enduring. The floor shook solidly, once or twice, at shock-waves from nearer hits.

Two-thirds of his time was gone. No use repeating the threat again the battle was already lost or won.

Perhaps the Over Race could recognize one of their errors now-an oversight that was understandable. since Venus had no water and no oceans, and the chance of a sufficiently violent explosion under the pressure of a great mass of water inducing the hydrogen-helium reaction, by a star, must never have played much part in their thinking. But of course they knew the theoretical possibility, and that once begun in a hydrogen concentration vastly above that in the Sun, it would be a chain reaction. And they could figure the effects. Within minutes after the detonation of Earth's oceans, Venus too would be dead, sterilized by the terrific outrush of heat and radiation; it was doubtful if such a blast would leave any life in the Solar System. Watchers out in the Galaxy, if there were watchers, would record a stella nova of unaccountable briefness...

The other mistake the Venusians had made—the psychological one—was probably a mystery to them even now.

Degnan called once more, "Margaret!"

She did not stir; she hardly seemed to breathe. He wanted urgently to see light in her eyes again, see her face alive once more, if so it be that this were the end. He grasped her shoulders and drew her erect, unresisting.

"Margaret—wake up. It's all over now." That was the truth, one way or another. "Come back to me, Margaret..." He bent to her parted lips. That seemed to rouse her; he felt her lips come alive under the kiss, her body lose its hypnotized rigidity.

He said close to her ear, "I'm sorry. I'm afraid I hurt you for nothing."

She sighed deeply. "I'm all right now. It's gone...and you're here... and I know it won't come back any more," she murmured, like a little girl being comforted out of a night-mare.

General Fleming coughed. "Colonel Degnan, Your time is up."

EGNAN released Margaret and turned away, his face a frozen mask. Did the Over Race's misunderstanding of human mentality go so far that they had imagined he was bluffing. Or had he misjudged the Over Race—were they too capable of the hatred stronger than death, which so often in the human past had led men to go to destruction, if only to take an enemy with them?

He said, "I'm ready," and to Margaret, "Don't worry. It won't be long."

But her face was stricken. She must have sensed something behind the words; or perhaps she remembered and understood something of the message he had tried to send.

Degnan didn't look at her again. The guards flanked him in the open doorway. The General said briskly, relievedly, "We've landed a flier in the street outside. Only a few minutes—"

King, seated on the edge of the General's desk and apparently absorbed in putting on his watch, looked up abruptly and said, "Wait." Fleming stared at him, opened his mouth; but the deputy from CFHQ gestured imperiously for silence.

Degnan tried to listen, and was hindered by a roaring in his ears. Unsteadily, he put a hand on the jamb of the door, and felt no vibration in the cool wood; and he saw the answer in the others' faces at the same time.

King reached for a phone at his elbow. "Sector Defense... That's right. Give me the Head Coordinator. At once." He snapped a curt question or two, listened, then broke the connection and asked for another, direct to Combined Fleet Headquarters. Waiting, he gazed quizzically at Degnan. "No projectiles have come in for close to three minutes now—and they were coming five or six to the minute. Now, what shall I tell the general staffs?"

General Fleming made an incoherent noise; his eyes darted from King to Degnan and then to Margaret, and his wrinkles, for perhaps the first time in their history, expressed something like fright. He looked on the verge of crossing himself.

Degnan moistened his lips. "They'd better get in touch with Venus right away and discuss surrender terms. The surrender of Venus, that is... The Over Race ought to agree in occupation and destruction of their spawning beds; it isn't in them to set their race above self-preservation. That way they'll be extinct after a generation; and we can get along with the Under Race."

Margaret moved quietly to Degnan's side, and he drew her against him; but he was bracing himself for the questions that would come as soon as King finished talking to CFHQ. He couldn't answer those questions—not until Earth ships had taken control on Venus and spiked the enemy's guns.

And then— In him was still a cold, dead weight of knowledge: Venus was defeated, but the curse that had been laid on him remained. He was still and forever an outcast from the rest of his victorious kind...

Earth would be grateful; no doubt they would be ready to give anything he asked, perhaps even the right to remain among men. He couldn't do that, though.

Margaret nestled her head against his shoulder, and looked up with the beginning of a smile on her lips. She might smile again, in a world without fear, as she had in that picture on the telescreen... He blotted the thought out.

She said, "It's really over now, isn't it? And we're all right."

Degnan looked away for a moment. She was going to be hurt too, he realized, and the sooner it was over the better. For a moment, just now, he had wondered if she knew...

He said in a low voice, disjointedly, "The end of one thing is the beginning of another. Now that the System is safe for man—before long they'll be building the first ship to go beyond. A long trip, a one-way trip perhaps, for whoever's chosen to go. And I think—"

Her arm tightened about him in a close embrace of possession and understanding. She whispered: "As long as the star ship will carry two..."

PRESENTING THE AUTHOR

ROBERT ABERNATHY

 \star

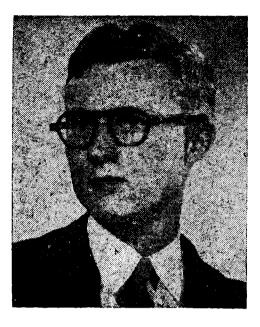
MY PERSONAL history seems somehow far less interesting than that of the people about whom my stories are written; they live stimulating, if often somewhat nervewracking lives, whereas, I have spent all of 25 years on one planet (though it's much too early to give up hope of seeing a few others someday), have never had any dealings with alien monsters (unless you include Gila monsters), nor even seen a flying disk, strange as that may seem in this day and age. I was born in Los Angeles, have lived

I was born in Los Angeles, have lived since then in various places between that city and Boston, but have managed to stay long enough in southern Arizona to qualify, if not as an Old Settler, at least as a native. (In Arizona, where everybody comes from somewhere else, a few years make you a native, and when you've been here ten years or more they come asking you for your personal reminiscences of the Earp-Clanton feud.) The weather here is, as everybody knows, the chief attraction; it's wonderful, except when the wind blows and it becomes impossible to tell where the ground leaves off and the air begins.

As for formal education, I have attended the University of Arizona and the Harvard Graduate School, from which I have an M.A. and hope soon to receive a Ph.D.

So far as memory serves, I wrote my first science-fiction story at the age of ten, in school hours when the teacher wasn't looking; it involved a hero and a villain, swooping about in rocket ships and trying to do one another dirt with all manner of obscure radiations, one variety of which was labeled "radio X-rays" (the electromagnetic spectrum was at that time not so much as a cloud on my horizon). That was as far as it went; the plot was as weak as the science. Later efforts, I trust, show improvement in both directions.

IT IS sometimes discouraging to find how many people refuse to take the science in science-fiction seriously. But one is likely to discover that these are the same people who have no real idea of the nature of science, confusing it, perhaps, with the use of long, queer-sounding words (which may simply be a form of intellectual bullying), or with the building and operation of complicated machinery, or with abstruse mathematics. Actually, the essence of the scientific method is prediction: prediction of the unknown on the basis of what is known, i.e. has been reliably observed—and, of course, checking



of prediction by further observation or better still by controlled experiment. Thus the method answers to one of man's oldest practical desires, the wish to know what is going to happen next in order to prepare for the event, or to do something about it, or merely to tell one's friends and neighbors about it in advance and watch their faces when one's "prophecy" comes true—this last being one of the science-fiction writer's principal rewards. For the sciencefictionist, insofar as he honestly tries to make predictions from known fact, is behaving as a scientist should. The main dif-ference is that a physicist who says that two masses will attract one another bases his statement on very few and simple facts, so that his prediction has a very high probability of proving correct (though it can never reach 100% certainty; there is no such thing as an "exact" science); but the writer who tries to foresee how people will live, love and pay the grocer in 2500 A.D. is dealing with a mass of hard-to-predict variables—particularly of human behavior—at which the practical scientist throws up his hands in despair. We needn't feel disgraced, then, if our prophetic batting average is low; and even so, once in a while we have the satisfaction of seeing

(Concluded On Page 194)

PRESENTING THE AUTHOR

(Concluded From Page 57)

our predictions pan out. Personally, I am mildly proud of having been the nteenta writer to predict atomic bombs before. Hiroshima.

This doctrine of science-fiction may be hard to apply—but I find the same difficulties in my own special field of linguistic science. A linguist is not, as many people still seem to believe, a man who learns foreign languages; no doubt his earliest ancestor was the prehistoric tribesman who knew enough words of a neighboring tribe's idiom to shout insults at them before battle was joined, but the modern emphasis is on finding out just how a language—any language—accomplishes its purpose of furthering social cooperation. To know all about that, the linguist should ideally know everything about all human activities and interests—which is exactly what the science-fictionist needs to knew. Such an ideal is unattainable, of course; but that doesn't stop us from trying.