

# PLANET STORIES



VOL. 6, No. 3

A FICTION HOUSE MAGAZINE

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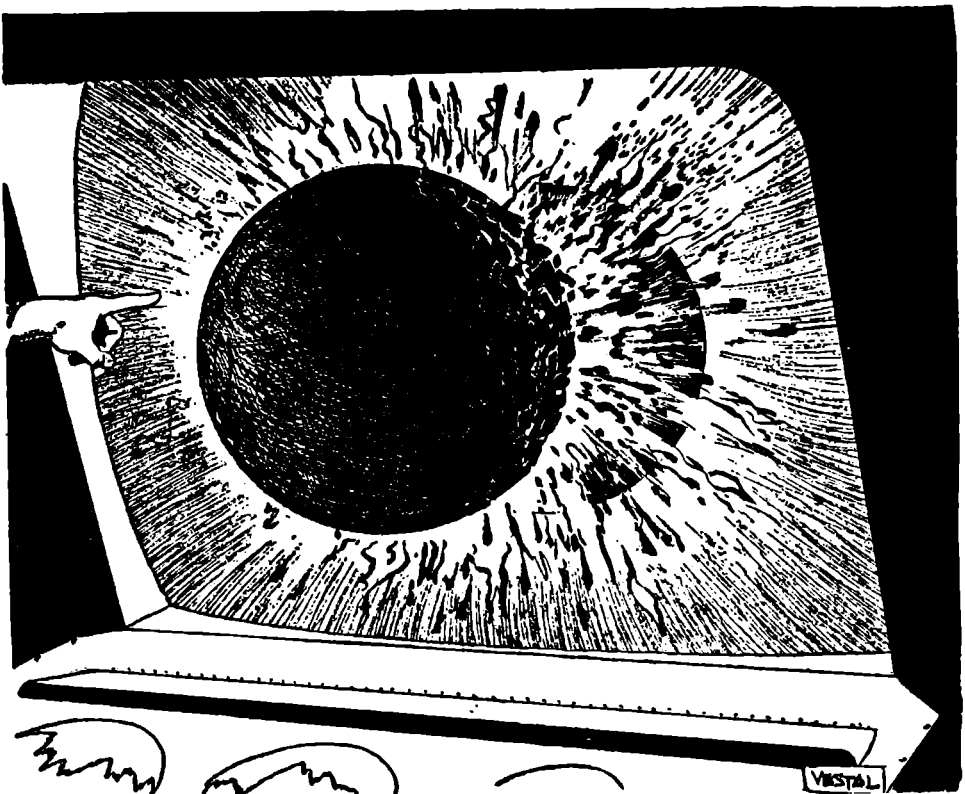
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# BEYOND THE X ECLIPTIC

By FOX B. HOLDEN

*Earthman was dying of boredom; Hope had become folly. Work merely a means to avoid insanity. And death was the great reward . . . until Cragin, step-son of darkest space, dared the Barrier; dared to soar beyond the X Ecliptic—to the machine planet—where The Owners grimly governed all the fading galaxies.*

**E**ARTH'S eyes still blinked in the bright sunlight in which they suddenly gloried again; Earth's throats, no longer fevered and parched, still wondered at the cool feel of fresh water, which had not trickled down them for more than five centuries. Earth's minds were still ignorant of the answer; they knew only that this was Life, although they had failed by themselves in cheating Death, and had already calculated the dimensions for their graves.

The small calendar on the podium said Sunday, June 9, 3024. Cragin placed a small

black notebook beside it. Neither his carriage nor mien were those of the gaunt-faced, tall-browed men of science who sat, ill-at-ease, mute, in the broadly-aisled tiers of the echo-whispering auditorium. For Cragin was not one of them. He was young-old, something of slate and steel; gray, something almost of legend and of the mystery of Deep Space itself. He had the quiet voice of all men who had lived their lives within arm's length of the Barrier.

"Gentlemen," he began, "I doubt if I have many of the scientific answers you

want. In calculated, scientific terms, I am not able to tell you why there is water once more in the river beds, clean air to breathe again, snow once more in winter and rain again in springtime. I know little more than the simple facts that the grass is once more green; that the hell-deserts have vanished. I have come here with few heretofore unknown scientific phenomena which I know you seek to explain the rekindling of the Sun and the replacement of Earth in its old path around it.

"The President told me that all I say is to be recorded so that you can pick it apart with the proverbial fine-tooth comb when I'm finished to see if I've dropped some new hint on which you can go to work. He told me personally that I'm your last hope for a solution to the riddle of the Change, because I'm the only living man who ever took a ship further than a light-year beyond the Barrier; because I've flown more parsecs of Deep Space than anybody else; because I know more about what's out there, and what is not, than you do.

"Add what I have to tell you to the many theories you've already amassed but for which you can find no scientific proof in knowledge as you know it, and you still may not have the kind of answer for which you're looking. Not unless, gentlemen, the Change has taken place in men as well as in the solar system in which their graves were once already dug.

"If, somehow, the little I know is sufficient to give you your answer; an answer which satisfies you completely, then the Change has been to yourselves as well as the ground upon which you walk. If it is not, then perhaps you may never have one.

"A little more than ten years ago, this is how it was . . ."

He opened the notebook.

"I DON'T think it's a runner, sir. Not unless they've found a new place in Deep Space to bootleg their water. But we're hearing English all right."

The communications lieutenant tried for a new track on the com-beam and gambled that there were a few minutes of overload time left in the amptubes. The staccato whisper faded altogether for a moment, then came back a trifle stronger.

"Blow 'em out if you have to! Mister Grimes, stand by with auxiliary communications." The Stellar Patrol captain readjusted his own headset and waited. It was all there was to do. The drive had been cut; the ship was vibrationless, soundless, and the crew's breath was shallow. Grimes hunched over the auxiliary unit as though waiting for the main amplifier to blow up in the lieutenant's face.

Then it came; weak, but distinct.

*Griffin calling . . . this is Griffin calling —SFBB-3. Lost . . . Fowler Griffin dead. This is SFBB-3 can you hear me . . .*

"Good Lord, sir—"

"Mister Cragin! Can you estimate her position? Grimes, contact the nearest base in this sector. Get a relay from Earth on the flight plan of Special Flight Beyond Barrier Three. Mister Kramer, I want a running plot of the track every three minutes. Cragin!"

The Captain punched the red FSA drive-room button and the Patrol ship slid from her drift into a white-hot mushroom of speed. The tower deck vibrated beneath Cragin's feet.

"She's further out than I've ever been, sir. I can give you an approximate trajectory, but where she is it's suicide—"

"For how far out beyond the Barrier do you have exact knowledge of critical warp speeds, Cragin?"

"A light-year maybe, sir. No more. Beyond that nothing makes sense; beyond that the variables will shoot any comptometer on this type ship to hell. Beyond the Barrier it's like tight-rope walking between the dimensions and after you get just so far—"

"I know all that. How far out is she?"

"Fifty light-years anyway. Maybe two hundred. I can't tell. I think she's holding for dear life to a critical. If she loses it, we lose her for good."

"You think she'll make it to this side?"

"If she's lost, no, sir. She'll just keep on out there until—"

"Until?"

"Until her comptometers break down, until her drive is exhausted, until she makes a mistake. Until eternity."

"Sir," Kramer broke in. "Three minutes since pick-up. Her trajectory's whacky. She's sort of side-slipping in, but at the

speed she's making, she's going to miss Barrier just by the width of her skin. She'll tangent off sure." Kramer thrust a hastily prepared three dimensional plot-check forward.

"To bring her in we've got to go out and pick her up, sir," Cragin said.

"Grimes!"

"Here, sir." Grimes came up with a similar plot-check, described on a regulation ship's form. The senior Patrol officer compared the two, the flight plan and the running trajectory laid out by Kramer, and Cragin's teeth glinted through his lips as they went slack in amazement.

"God, sir, that's impossible. It ends at the square of light-speed!"

"Fowler Griffin is—was—one of Earth's topmost scientists. His work is beyond question, Mister Cragin. More so, perhaps, than that of any other. Your irreverence is out of order."

"Unintentional of course, sir."

"Plot the difference between Griffin's planned return and the trajectory Kramer just tracked. Drive room!"

The sleek Patrol ship quivered with the added thrust of her auxiliaries; her needle-tip nose swung a half-minute to her own three-quarter starboard axis.

"Can we pick her up, Cragin?"

"We'll have to go the limit."

"Then take over the panel, Mister Cragin. Kramer! Attempt return communication!"

"As she sails, sir."

Cragin's thin, sensitive fingers flicked over the flight control panel with a dexterity and familiarity that is born only of a million light years of intimate, sometimes desperate familiarity, and the Patrol ship's complex, high-strung nervous system responded as though it were a part of the man who held its throbbing life in harness.

**T**O RANDOLPH CRAGIN, born under a dying sun and of a mother dead from desert-parch even as her labor ceased, there had never been life worth the living anywhere but in the cold, clean loneliness of Deep Space.

He had bought odd second-hand parts from a junk dealer to build the first craft he had ever flown; he had made the moon with it before its jets blew and left him

with the gray scar that ran from his left temple to the point of his square chin. He had been sixteen then, and too old to scare, too young to deter. From then on, there had been work in a lunar mine to pay for his next ship; then prospecting the asteroids to pay for a better, faster one. There were five years of hauling black muck from Venus and water crystal from the low ridges of Mars before he had the money he needed to build the ship that would take him into Deep Space for the first time, and a couple of years after that doing routine commission jobs of surveying outlying planetoid belts for the government to earn enough to keep his drive alive, and when he thought of it, his body.

In between jobs, when he flew until he was broken again, Cragin found out more about Deep Space and about the Barrier, beyond which only one other beside himself had ventured, than any other man who lived. His predecessor had not. To Cragin it was sort of a challenge—sometimes more than a daring wanderlust, sometimes a little less, when he picked new directions from sheer boredom. But beneath it all, there was something that rebelled; that bordered on resentment, and at the same time on awe. He had never known which was the cause of which, only that the men of Earth (and they were the only men in this lonely system of planets) were dying, and had long since ceased to be awed by anything, or to be stirred beyond the narrow limits of their own complacency. They had achieved all there was to achieve; death was to be their reward. Hope had become folly; work a means to avoid insanity; science the only comfort and pleasure, because it had been thoroughly mastered.

Except, perhaps, for the Barrier itself. Beyond it, Earth science had little hold, its concepts little validity. It was therefore a worthless waste, for it did not adhere to the facts that men said were true. And Cragin had found it difficult to decide why it was that he had chosen to let himself get swallowed up in it. Maybe for the sheer pleasure of laughing because it was so easy (the comptometers did all the work of plotting the warp paths and keeping the ship at the right critical speeds so it wouldn't leave them and go plunging off into dimensions

from which there would be no return) maybe because he hadn't been as positive as he was supposed to be that what was beyond the Barrier was such a waste after all.

To keep himself occupied he remembered what there had been to learn; to recam the comptometers in anticipation of the ever increasing speed of warp shifts; how to change direction and yet keep a bearing on home; how to fly some of it by himself, juggling equations in his head while the comptometers cooled off.

Then two years ago he had joined the Patrol. Chasing water bootleggers who stole from government reserves and sold at fantastic prices was something he hadn't as yet had a hand in. That he had become an officer in a year and a half instead of the usual six hadn't surprised him much; if he weren't a captain in another year and a half he'd resign. And dig the asteroids again maybe. It didn't matter.

"At Barrier in four minutes, sir. Grimes, stand by comptometer One with her coordinates . . ."

Comptometer One rose from a deep hum below the range of hearing into audibility. "Now, Mister Grimes!" Comptometer Two checked in and the hum rose steadily to a high pitched whine. Three came in.

"I've got her on the radar track, sir! There she is—good Lord!"

"Signal her to cut her drive before we lose her altogether. Grimes—" But Grimes was too slow at resetting comptometer cams. Cragin plotted a trajectory in his head and kept alert for the least change in volume of the comps. Deliberately he brought the nose of the hurtling Patrol craft swinging about under the grazing touch of his fingertips and sought to keep the big ship on her warp while he estimated an intersection point.

"Sir," Kramer was howling, "I can't raise—yes, there! She's cut her drive. But she's not bow jetting a squirt!"

"Just get the M-fields ready. I'll tell you when," Cragin said. If there had been any excitement in his voice before, it had disappeared. He knew they'd catch her now. He was on the Patrol ship's back and he knew he could ride it down.

"You've got maybe a dozen seconds, Cragin," the captain told him. "At a drift

her critical will be shot to blazes—"

"M-fields!"

The Patrol ship jolted, and Comptometer Five checked in and rose to a scream as the struggle to maintain critical speed with the suddenly increased load was fought. And won.

Cragin manually checked in Six just to make sure, and kicked both ships into the trajectory that would fall them through the Barrier.

Then it was all over, and a tiny, bullet-shaped, explorer-type craft of less than a fifth the Patrol ship's length was secured alongside, her aft tubes still smoking.

Cragin relinquished his command and waited, while two space suited crew members picked their way along the M-field on their portable mag units. It took them less than ten minutes to get back. They carried another form between them; a form smaller than a man's, and limp.

"It's his daughter all right," Cragin said as the Patrol captain waited at his side while the two crewmen undogged the girl's fully-transparent helmet. "Name is Lin, I think. Lin Griffin, student of her father's, and up with the best of 'em, they say. What in hell they were doing out there only she'll be able to tell us. If she'll tell us."

"If she lives to," the captain said.

The oval shaped, sharp featured face was pasty with space fatigue, and the large, wide set eyes were closed in unconsciousness. The short-bobbed, copper-hued hair that hung close to her slender neck and set off the wide forehead was still well groomed, but the high cheekbones on either side of her small nose showed sharply through the taut, smooth skin that covered them, and bespoke perhaps days of near exhaustion. Cragin fastened his eyes on the girl's wide, generous mouth, waiting for some sign of returning consciousness. But there was none.

"Hardly out of her teens," the captain muttered. "Two damn young to die. Get her to my quarters; notify the ship's space surgeon and have him put a corpsman on full duty. Want to know soon as she comes around."

"Aye, sir."

Cragin turned to his superior. "Special orders?"

"Have Kramer make a signal for a hospital ship and sign it with a priority one. That's all."

"Yes, sir. You know she isn't beautiful but she's not bad."

"Too damn young to die. Tell the crew we're back on SOP."

"As she sails, sir," Cragin said, and wondered if the girl would die, at that.

## II

IN OLD fashioned black letters, the legend on the thick metal glass door said OFFICE OF THE ADMIRALTY, SPACE ARM. Cragin swung past it as though it had said Control Room and an officer of the day clad in an Earth Headquarters uniform told him that an Admiral Kirkholland would see him immediately.

Kirkholland's name was on the next door, and under it in smaller letters the single word, "Intelligence." What the hell, Cragin mused, why argue.

"At ease lieutenant. Sit down, Cigarette?" Big, thought Cragin. Tough old bird, red faced, cropped white hair, chief pilot's rockets pinned to the plain front of his tunic, Cragin wondered how long he'd been flying the eight-foot plastaloy desk.

He accepted the cigarette and sat.

"More time we save the better, Cragin. Here it is. You were recalled because your records how you know your way around in Deep Space better than anybody in the whole Arm. HQ figured it'd be a better bet for this job to rely on what Intelligence training a regular Patrol officer gets than to try teaching a specialized Intelligence officer how to handle himself out where only yourself and Lin Griffin have ever flown and gotten back to tell about it. Except that so far, you're the only one who's told anything."

"Not sure I follow that all, sir. I take it Miss Griffin—"

"She's getting along all right. Ready to leave the station hospital in a day or two. Only she won't talk. Just mumbled something about an Ecliptic X when she finally started coming around, cried a little, and then shut up tight. Doctor says it's extreme shock. I don't think so. You can't do reams of mathematics that nobody else can make

head or tail of when you're suffering shock. She not only won't talk, but after she finishes each sheet of calculations, she tosses it in the bedside incinerator tube. So I'm making guesses."

Cragin let a little smoke dribble from his nostrils and tried reading Kirkholland's penetrating look.

"The market, sir? There wasn't a gram of water crystal in her ship when—"

"The report's been read phonic by phonic, Cragin. We've had the market pretty well under our thumbs up to now, and we can't go taking any chances. Setting up clay pigeons to lull us into a false sense of security is as old as the Martian ridges but it's worth thinking about if they've found a way to operate outside the Barrier."

"What about the flight plan she and her father had to file, sir?"

"In order, of course. Maybe just a clever part of the scheme. And who would suspect a man of Griffin's caliber and position?"

"I see. She's a definite suspect, then, and—"

"Can't say that. Officially. But because of the circumstances surrounding her return, she's certainly subject to observation."

"My job."

"You've been cleared by HQ, and put on carte blanche answerable to myself only and to the President. As soon as you go out that door, you're on the job. And remember we're not interested in her any further than to whom she leads us. This," Kirkholland handed him a small, smooth, slate-colored rectangle of enamelite with the insignie of Space Intelligence atomically engraved through its molecular structure, "will take care of anything you need at any time from any department of the government and of course from any private citizen."

Cragin recognized and accepted it. He knew that it had been activated to his own unique neurophysical vibration specie, taken of course from his personal record. Within moments it would turn glittering white, and only as long as it was white would it be valid. Taken from him or lost, it would revert to the gray color and belie its bearer as either a chance finder or an imposter.

"Good luck. And I repeat, if we're right, it's to whom she leads us that I want brought in. Now blast off, lieutenant."

"A-blast she sails, sir."

Something new, anyway. Not exactly new, but it could mean tight-roping beyond the Barrier again. Cragin's pulse picked up a beat. Routine as hell of course. Take a week, maybe ten days. But it was something he hadn't tried before. Until he had it all under wraps, it could be interesting.

HE HAD almost lost her in the sudden sand flurry, but it wouldn't have mattered because he knew now where she was headed. He hoisted the aircar a thousand feet and slacked throttle.

"Security channel 12 open. Central Port please ack."

"CP go ahead 12."

"This is Cragin on CB-42-SMBB. Check please and know me by this."

"Clear CB we know you."

"Is that custom job registered under Griffin still in your park?"

"Registered all right and primed to the forejets for a big ride if you ask me. Orders?"

"Whack up her radar, but not with an axe. And warm me up an SP-15 if you've got one, with a ten comp bank. Soup the drive and gun circuits. Want a duplicate of her flight plan. That's all and beam me when she blasts."

"When she blasts."

Then it was just a matter of sweating her out. Once Lin Griffin took her trim craft into Space it would be routine, if her bosses, if she were actually heading for any, didn't risk a track beam on her. If they did and picked him up at the same time, they'd need faster guns than he had.

The SP-15 looked brand new, and Cragin had little more than buttoned her up when flight control beamed him. He kept the Griffin ship tracked for a full minute, let it cut the edge of the Mars ecliptic before he cut in his own drive. She was giving Pluto her starboard when he decided on a comfortable watch dog position, and she was headed for the nearest Barrier co-ordinate within an hour afterward. Just as though, Cragin thought, somebody had written the whole script out for both of them, and all they had to do was say their lines and pretty soon the whole thing would be over.

He checked the gun circuits, tried the

detectors for a track, jacked in the comptometer bank. One began to hum a little and it took him off guard; he hadn't expected it this soon. She had picked up speed and was going like hell even for a Barrier bust. But he was certain she hadn't spotted him, and he was flying in her blind spot to keep out of her electroscopes. Sooner or later she'd check in her radar proximity beams and when they didn't work—If she were as smart as she looked she'd be swinging her electroscope lenses all over the sky.

Her Starwasp took the Barrier bust as though it were just so much Space between Earth and Moon, and Cragin straightened a little in his cushioned acceleration seat. He threw a track of his own on her, got an echo measure on it and entered it as a constant into the comp bank, knocking out the variable that had represented his own control-error margin. It was the only way he'd be sure to keep her. But if she made a mistake or her own comps broke down, they'd both fall off the tight rope.

Three cut in and began whining. Cragin tried a speed check; they'd passed light-speed, and there was no more danger of her catching him in her electroscopes. The velocity needle began wider oscillations, and the hum from Four verified it . . . the critical speed changes were getting trickier. Twenty minutes ticked off, and Cragin knew they were further out than when he'd picked her up two weeks ago. Light-speed trebled.

Back to double. Now times twelve.

Six was screaming. Seven started humming, and Cragin felt his clothes beginning to stick to his back. By himself, he'd never had more than seven comps to fly on, and had never taken the risk of flying past breakdown. That was suicide. The SP-15 had been fitted with ten as he had ordered. According to the books, if you tried to use more than that, the circuits in One would burn up. Nobody, except Fowler Griffin and his daughter, had ever tried past seven except himself. The risk wasn't worth what you got out of it, and listening to a bunch of comps getting ready to blow themselves to hell didn't net you anything but a bad heart.

Eight came on. One began to glow. Cragin knew he either had to break communi-



cations silence or kick himself clear into eternity.

His thumb slipped on the mike switch.

His fingers felt like wet sticks, and the mike was cold and greasy to his touch.

"Calling you Starwasp calling you. This is Cragin, Space Intelligence on a CB. On your track at 900,000 your six o'clock level. Let me hear you, Miss Griffin."

There wasn't any answer and he tried again. Nine was humming. "I've orders to burn you up if you refuse to acknowledge. Ack please." He tried to keep his voice flat and machine-like so he wouldn't give himself away, but he sounded like an hysterical schoolgirl compared to the voice that answered him. It was that of a woman; a woman who might have died and shriveled in the deserts a hundred years ago.

"**F**OLLOW me, Patrolman, if you have the courage. Turn back if you'd rather be safe to choke your life away on the sterile place you call home. There's a lot of room beyond the Barrier, but little for men who worship merely their own perfection and stay blind to problems which they cannot solve. Or go ahead and burn me up if you think it will be of some help to you."

"Starwasp!" He felt like a rank recruit. But Nine was beginning to shrill. She was goading him, challenging his courage, daring him to burn her when she knew that by so doing he'd defeat his own purpose. "You contraband? I'll give you ten seconds to answer." He was being ridiculous; had mishandled the whole thing. What the hell was the matter with him? She was stalling him, making a fool of him, until his comptometers couldn't take it any more.

"There is more that is contraband where I'm going than you dream of."

"Where you bound?"

"The X ecliptic. Before he died, Fowler Griffin found it. He found the single machine-planet that circles within it. I expect to join him there."

"Miss Griffin . . ."

"I've told you enough. Among the people of Earth there's too much apathy already; my story would only make it worse. Follow me if you want to, burn me up or turn back otherwise. But make up your mind."

"It's made up!" Cragin barked back.

"I—" He wondered what she meant by the machine-planet and by the X ecliptic. That was what Kirkholland had said something about. And he wondered about the other things she said. Earth was a sterile place. . . .

"Since I only have ten comptometers, I—"

"That's all I have," came back.

And, in the last analysis, he would be safe just to choke his life away. . . .

"My ten is beginning to hum already—"

"So is mine."

And maybe the people of Earth were stuck on themselves just a little. . . .

"OK, I'll follow."

"You'll have to now."

And they were apathetic, just sitting back, waiting, telling themselves that all had been done that was possible to do. Because they had done it.

"Velocity needle's going crazy—"

She didn't answer again, and Ten was screaming so he couldn't have heard her if she had. Maybe two minutes until it broke up in his face.

The needle went wild. It hit—*just where the original Griffin flight-plan had ended—light-speed squared!* And then it fell off. And Ten cut out, and so did Nine, Eight, Seven . . . Six—Five. Four hummed evenly. And Cragin knew that he'd never forget that impossible series of critical speeds for what remained of his life. Wherever they were, it was within seconds of the absolute . . . a second Barrier, Cragin thought, which existed simply because men didn't know how to devise a way to go any further. But—

"You're in X ecliptic now," Lin Griffin's voice told him. But it was a different voice than it had been before. There was something new in it. Something Cragin couldn't find a word for. "Within it, you'll find flight conditions very similar to those of ordinary Deep Space. In a few minutes, you'll be able to pick up the machine-planet in your electroscopes. That's where we're going. Unless you want to turn back. You can, now that you know how the warp pattern works."

"Trying to shake me?" His hands weren't slippery any more. "I won't shake. You're taking me straight to the boss or I'm placing you under arrest. I remind you that the Patrol's jurisdiction extends to wherever ia

Space one of its ships may fly. Acknowledge please."

He felt a sudden, uncomfortable warmth in his cheeks when she laughed. It was a light, almost merry thing. She was doing it again!

"Wherever I am, I rule, is that it?"

"In effect, yes. And—"

"There is no head man, no leader of a giant smuggling ring where I'm going, Patrolman. Just—" Her voice tapered off; the laugh was gone. "I will be easy to follow," she said.

The planet toward which they flew—Cragin could see it easily now in the electroscopes, although he could see no other and the 'scope seemed to draw what stars there were no nearer—was hardly half the size of the moon of earth. It glowed, somehow radiating a pale phosphorescence of its own, and its surface seemed entirely without configuration. Completely smooth, unmarked even by stray chunks of hurtling cosmic waste. It was in a definite orbit, yet around—nothing. It circled in an ecliptic described in three dimensions; they were no longer flying a tight rope, and the comps were quiet. Yet it was an ecliptic that men had never found. Except for Fowler Griffin. As though reading his thoughts, his daughter spoke.

"You wonder where its center is. It has a center. What did you say your name was? Cragin. It has a center, Cragin. Around which it has revolved for untold millenia. Only by accident, while he was searching for an almost negligible mass error in one of his computations, did my father discover that this ecliptic must exist, and must contain at least one revolving body. He found it. He determined its orbit. He found that the solar system itself is the center of the machine planet's orbit. It has neither aphe- lion nor perihelion, nor does its ecliptic ever shift. It is always perfect."

"I could almost believe you lady if you told me somebody had made it. But you'll never—"

"Somebody did."

"You mean your father—"

"My father discovered its presence, Cragin. I helped him with the latter stages of his calculations; accompanied him out here. He discovered its presence and he

discovered its function. And they—"

"Function? You mean it's a mine of some sort? Water crystal?"

"No, Cragin. It wasn't built to serve men. It rules them. For want of a better term, call it a control point. Because the machine-planet has absolute control over the axial rotation and orbital revolution of every planet in the solar system; over the heat emitted from its sun; over the physical laws which are peculiar to each of its planets. Father was trying to learn how to use it. He thought if he could discover how it worked he could readjust Earth, replenish the sun, remake—"

"I don't believe you, Lin Griffin. It's a ruse—"

"I will show you the mark where he died. They killed him, and let me go, half-crazed as I was, to keep men forever in fear of passing through the Barrier. I think they underestimate us psychologically, and that is why—"

"They? Who?" Cragin cut in, disbelief still welling in his brain, edging the tone of his voice.

"The—Owners, I call them, Cragin. They told us they own the universe."

### III

IT WAS as gray as the sand-blown skies of Earth in every direction; once past its artificial veil of luminescence, the machine-planet was a colder, more sterile thing than the widest valley on the dark side of the moon. His mind refused to believe what it knew to be true—that the surface of the sphere was hard, unyielding metal, worked in some gigantic factory on some impossible world to an almost frictionless smoothness. After he touched down, Cragin had to keep his forward jets checked in at almost ten times their normal landing thrust to bring the SP-15 to a skittering halt.

Quickly he donned magnetic boots, space helmet and suit, and buckled two short-barrelled Krell guns around his waist. They were loose in his holsters as he clattered toward the opening airlock of the Starwasp. He opened up the suit's intercom.

"Just keep your hands at your sides."

"Don't be ridiculous. I'm here to do a job, not play Junior SP-man. If you want

to help me, I can use you. If not, just keep out of my way."

"Miss Griffin, I—" But Cragin let the words trail off because he knew that for the first time in his life, he was out of his element. True, he was in an unknown Space on an unknown sphere, as he'd been too many times before to count—but this was somehow different. And Lin Griffin knew more answers than he did. He thought about showing her the small white rectangle of enamelite that Kirkholland had given him, but it would make him more the fool. She knew what he was; she had not defied his authority. She had not actually tried to evade him. She had simply talked him into something and he didn't know what it was. Believing her was his fault.

He followed her about a quarter mile over the smooth metal plain until she stopped before a ragged mar that had been forcefully seared into its surface by a distorch. Cragin saw what it was; it was a cross. The girl paused a moment.

He had never seen anyone bow their head to pray before. He stood silent.

Finally all she said was, "Someday I'll make them tell me what they did with him."

"All right. Let's get on with it. Where to now?"

"Not far."

It was only a hundred yards further that they stopped; this time the sear in the hard metal was shapeless, not as deep as the one before and obviously more hastily made. She fumbled in the pocket of her suit, and by instinct, Cragin's hands fell lightly over the butts of his guns. She produced a small, circular thing, pushed a catch on its side, and placed it near the ragged burn.

"A vibrokey," she said matter of factly. "Something father devised. You can find anything with it, once you know the object's vibration pattern. And you can open anything with it. It experiments with all possible combinations of magnitudes and speeds of vibrations, until it simply hits the particular pattern needed. Without it I would never have found the burns I left, and without it we wouldn't get in. Father said it could shake a whole building down . . ."

Within seconds a panel less than a meter square slid back, and he and the girl were beneath it. Then it was closing. There was

a passageway of some sort with a totally invisible source of illumination. Almost like what he'd run across beneath the abandoned gold mines on Venus, except. . . .

"Now we have to move quickly," Lin interrupted his thoughts. "We have very little time. They know we're here."

"I didn't hear—"

"THEY know. Down this way." There was another burn, this time on the wall of the long, gently twisting tube. It hurt his eyes; it was like walking down a huge, brightly-polished gun barrel, except that it was not quite straight, and it was hard to tell just when it turned.

"Can you do what your father failed to do?" Cragin said. He asked only to hear his own voice; it gave him at least a finger-hold on reality.

"Perhaps, if there is time. I did not waste those weeks in the hospital."

A panel telescoped silently into itself. It opened on a cylindrical chamber that had seemingly been made of a single sheet of metal, so flawlessly had the banks of control boards which it contained been built into it. The soft green-blue glow with which the chamber was suffused was generated by an ingredient of the metal itself.

Circling the room at about shoulder height was a continuous row of what were obviously telescreens; below and above them were the banks of machines which were constructed according to an electro-mechanical concept with which Cragin was totally unfamiliar. According to Earth standards, it was so much junk, a distorted caricature of scientific equipment.

And in the center of the chamber, just at eye level, was what Cragin knew must be the "brain" of the entire assembly. A cylinder within a cylinder, its inner workings thoroughly screened by a shifting yet motionless opalescence through which he could not see. What lied in the heart of the thing would be as completely beyond his knowledge as were the visible machines over which it was master.

The girl watched him as his eyes remained fixed on it. "It's the power source, as far as we could determine. For everything."

"For the entire planet."

"For the entire solar system."

"Sure, but not today."

"Not only for today, but for all time. Gravity, warp, everything. If you don't believe me, try explaining the difference between Space as it exists inside and outside the Barrier sometime. Those—" she gestured toward the upper rows of machines, "control the power. When you know how to manipulate them, you can move any body within the system at will—in any direction, at any speed. The sun itself, if you want to."

"All right, I'll admit it's smooth," Cragin said. His hands went to his hips, resting just an inch or so above the butts of his Krells.

"You're a fantastic man, Cragin."

"I—" and he laughed a little. "The trouble is, Miss Griffin, you people just never know when to quit. The average Patrol officer may not have much imagination; police never were supposed to have. It's true if you spin a good enough yarn to begin with, you might get away with it. But if you take it too far—well, it's sort of like overacting a part. The audience just doesn't believe it any more. You might almost have convinced me, I'll admit. But as it is—"

His words were falling uselessly about him. Lin Griffin had begun her work near the largest of the telescreens. In a moment she had made it come alive, and in a moment more Cragin was watching the entire system. She made another adjustment, and he was watching Earth alone. A second later, he was watching Earth, Venus and Mercury in their stolid journeys around the sun.

Something that sounded very much like a comptometer was whining somewhere, and he watched as the girl began working a three dimensional orbit plot.

Cragin didn't interrupt. He knew that had he been sure that she was trying desperately to bluff out a well-staged fake, he would have stopped the whole performance but there was something in the way she had turned from him, had simply started at her work.

"I could take a chance now," she said suddenly. "Do you think I should take a chance, Cragin?" She looked full at him. Whatever she was talking about, he

knew she was not kidding.

"Chance? I'm just a dumb cop, remember?"

"I think I could move it. I think I've uncovered the secret of at least Earth's orbit and axis control. It's the balance resultants that worry me . . . and if I were wrong—"

"According to you, Earth is a dead duck anyway, princess. So go ahead and make a mistake. You fast-talked me into tailing you here. Or I fast-talked myself. But according to your story, you can move the whole damn system and make it grow little men with big ears right from this cozy little spot. O.K. I'm watching."

The look in her eyes said she thought of him as something only a little more than a Venusian crag lizard, and then as her hand moved toward a console of circuit stabilizers, the look changed. Her hand stopped where it was.

"You haven't been any help so far. I brought you because there was no getting rid of you. But Patrolman, right now we've got trouble. Do your duty or something—"

The voice simply said,

"You did not obey."

Cragin spun around, the Krell barrels coming level. But he found himself completely helpless to press their switches. The mind that had spoken within his own had taken control.

WHAT Cragin saw was like a man. The similarity continued beyond the shape and size of body; it went further to his dress, and there it stepped backward in time. The wide shoulders supported a cloak of so dark a hue that its outlines seemed to become a part of the space around it; the large, perfectly proportioned body beneath them bore with the same arrogance a uniform of deep scarlet mail which seemed to shimmer although its wearer stood immobile. He wore no space-helmet, nor any weapon that Cragin could see.

"You have tampered with a work of the Owners," the voice said, "and have thereby broken their law." His cloak alone moved, as though sheltering a statue in a pre-storm breeze.

"That takes a death penalty in your book I suppose," Cragin said.

"There is another kind?"

"It's a cinch you never heard of civilized society. If there's anything we've got, it's lots of different penalties. But we've got our share of death, too. Ask goldilocks here."

"Death is nothing new to the people of Earth," the girl said evenly. "Nor are penalties."

"Yet you defied the warning."

"Because it might have meant life to us."

"Life and death are not yours to direct," the voice said. "That lies solely with the Owners. That is universal."

"By what universal right?" The girl's voice rose to the pitch of half anger, half contempt.

"How?" Cragin's voice was touched with the mixed overtones of curiosity and incredulity.

"By their own right. Through methods of their own."

"That's a hell of a scientific answer," Cragin said.

"It is no answer at all!" the girl said. She took a step forward toward the intruder, and there was high color in her cheeks. Only his cloak moved. "Perhaps you control your own destinies, if that is what you care to think. But not ours! For the use of your machinery, we will gladly repay you, in any medium that you desire that we are capable of supplying. But our role isn't that of intruder or wrong doer; it is simply one of desperation. With your machines, our planet, its life, might be saved. If you know of life, you know of the high value men put upon it. If you believe in—"

"Save your breath, honey. I think the bull of the woods here is trying to work up an angle. He's a phony. All he's got here are a bunch of damn good telescreens, and they've never moved anything yet. . . . Right, Buster?"

The figure in scarlet mail moved then. There was no sound, and hardly a show of motion as his fingers played over a switch-studded panel. The telescreens came to life. In each were pictured solar systems, some binary; one with three suns. All were circled about with planets turning in a precise geometry of motion. With barely a nod, the figure singled out the screen in which the

binary and its brood of planets shown like so many pin-points of light rolling in eerie slow motion through Infinity. A finger flick that Cragin could not follow and—

Three planets suddenly plunged head-long; in seconds there was a blinding flash. Even as he shielded his eyes, Cragin knew that he had been witness to the destruction of an entire system. Although it had been light-years distant, and the telescreen had relayed the coruscations of its destruction instantaneously, Cragin knew that there was no way to deny what he had seen.

"Ours is the power," the voice said, "of life and of death."

He wanted desperately to convince himself that it was all part of the same colossal fake—that it was simply one of the most fabulous illusions ever devised behind which to direct a system or galaxy-wide bootlegging net. It had to be that.

It had to be, he realized with uncomfortable suddenness, because if it were not, it represented a science which had no regard for the laws that impeded men; one that had risen to far greater heights than that of which men boasted so proudly. And that of course could not be. It was that knowledge alone which had made life worth the living for centuries. Perhaps, when she had refused to speak of what she had seen, Lin Griffin had been wiser than he thought. But she had said—

Cragin felt himself becoming sickeningly mixed up.

And whether he wanted to believe his own senses or not, he knew that here was no phony, no fake, no illusion. Realizing it hurt like hell.

THE cockiness was gone from his voice; he tried, but he couldn't keep it as he spoke.

"You are one of the Owners?" The girl said nothing. Her face was white, yet Cragin did not think her confidence was gone, just shaken for the moment. She had seen the hand of what seemed to be a man hurl a solar system to instantaneous destruction at will.

"I am not," the voice said. "I serve. I am of the second rank, as are all of my race, in the service of the Owners."

"You are here alone?"

The hand touched another stud, and a smaller screen wavered into luminescence. Cragin saw a fleet of spaceships, hovering in a geometrically perfect formation, any one ship of which would have been, by itself, capable of searing to dust the entire Stellar Patrol in a single, brief engagement. The formation of sleek juggernauts extended as far as the eye could see. It was like looking into two opposed mirrors.

"My guard," the voice said. "Manned by a race of the third rank."

"I think I get it. The Owners sit home and quietly rule the universe while somebody else does the—" Cragin cut himself off. It was the wrong track entirely. It must be done differently. "The woman and I," he said evenly, "would be willing servants."

For the briefest moment there was silence, save for the muffled gasp that Cragin heard at his shoulder. But the girl said nothing.

Cragin watched as the hand of the red-mailed figure grazed other banks of relays. In quick succession all telescreens went dark.

"On each screen," the voice said, "you have seen a complete system of planets. In this control point there are exactly three hundred screens. Throughout the Owners' domain there are perhaps slightly less than a full billion of such control points as these. And there have seldom been any which have not been so well concealed, in suitable relationship to the intelligence level of that system-group controlled, as to have yielded to discovery."

"You have not answered my proposal," Cragin retorted. "You're as aware as I am of what's going on in my mind or you wouldn't bother with all the gory details. You know we could serve, even on the— the 97th rank or so . . ."

"Proceed."

"Don't try to cover up your own slip. You talk slow, but you get a little ahead of yourself. This outfit is supposed to be cached away with such cleverness that an Earthmind wouldn't be up to locating it. Only we did. We're not as dumb as we look, even to you. Your record would get a little smeared up if you did away with a couple of potential servants. The wheels might not like that. Tell me I'm wrong."

"You think quickly. You dare to offer a

proposition to an emissary of the Owners."

"It's no proposition, it's a statement of fact."

Cragin could feel the sweat behind his ears start to roll down his neck, and his clothes were beginning to stick to his back again. But he had been in jams before. When you couldn't shoot, you had to talk. About anything that came into your head, but you had to talk.

"Servants of the second rank do not err, Earthman. Upon reexamining my logic, I find it sound. Yet in the process of carrying it to its ultimate, I conclude that inasmuch as the mathematical possibility exists that you are capable of being tested successfully for a servant of the menial ranks, a final decision warrants the deferment of your destruction pending administration of such examination."

"You mean we live."

"Failure to qualify as a servant will mean your destruction."

There was near hysteria in Lin Griffin's voice as it broke the spell Cragin's argument had created.

"Cragin, you can't realize what you're doing! You're selling us into sl—"

"Service, Lin Griffin," he cut her off. He knew he was bruising her arm with the quick pressure of his fingers. "Service to the Owners."

"Then follow me," the voice said.

#### IV

Cragin had little idea of how long they had flown, and none of the number of continua through which they had warped. They had been allowed to sleep, and upon awakening, had received food. That they were under guard was only to be sensed.

"They can afford to take us for granted," he muttered. He felt for the butts of his guns; they were still at his hips.

"Don't—" the girl said.

"Don't give it a second thought. I know when I've had it, and they know I do."

"You're convinced, then."

Cragin looked about the confines of the small metal cubicle in which they had been quartered as though trying to see through its walls for another glimpse of one of the flagship's crew. The servants of grade three

were as unlike men as their cloaked captor had been similar. But not less incredible than other creatures he had seen. Only—intelligent. That, if nothing more. Cragin mused with a grimace.

"I could use a different word, kid, but it would come to the same thing. If IQ meant the social register around here, even the snottiest ancestors either of us ever had would look like only moderately successful bums. They got us where the gray matter's short. Of that I am convinced."

"They didn't have to fight very hard. Or should I be thanking you for my life?"

"Up to you. I'm just stalling for what we can get out of it. Who wants to die? Oh, I forgot—"

She turned away from him, and he fiddled with the controls of a small built-in telescreen. It was simple enough and he got it working easily, but it showed nothing. Just blackness. He left it on.

"You're thoroughly convinced of everything he told us, aren't you?" she asked at last.

"From a purely logical standpoint, what else—"

"Purely logical! For a little while I thought there was a chance that—that you weren't like all the rest."

"All what rest? I don't get your range, kid," Cragin answered.

"First you thought they were fakes—"

"At first that was logical, too. But old cloak-and-ray-gun there proved pretty damn conclusively that the crowd he works for are the bosses, the big bosses. That's what gets me."

"And it's the real reason, isn't it, that you wanted to call them fakes? Couldn't bear the idea of the precious culture of Earth taking a back seat to anything."

"That sounds good, coming from one of our top-notch scientists. The daughter and pupil of Fowler Griffin. One of our most respected . . ."

"Did you think we weren't human? Are scientists something to be worshipped?"

Cragin looked at her for a long, steady moment. He was mixed up again, and she was doing it.

"Without our science, Miss Griffin, we'd've all died five hundred years ago. Maybe that's why it takes top rating back

home. What our men of science say we can do, we do—what they say we can't, we know we can't. It's that simple, only I don't see why I'm telling you this. For five centuries men have known from the day they could talk what their lives would be from that day to their deaths, and from one end of the universe their forbears had mastered to the other. It's all mapped out. It has to be, because the scientists tell us—they draw the maps. We follow them."

The girl was silent then for a long time, and Cragin fell to wondering exactly what she was getting at. Or maybe—maybe it was just the strain, or the shock of realizing that there were scientists who were of greater stature than Earth's, and it was they who truly ruled.

But the girl still had him mixed up.

There was a sudden gasp from her and he turned his head. The blackness in the telescreen had suddenly become punctured with white-hot, burning dots of light. Dots of light, perfectly aligned, in long, straight rows—a gateway! A gateway of stars, forged by the hands of those who owned all Space and Time, put into position to notify the entire cosmos that here for all who might seek it was the entrance to the home of the Owners!

For a moment Cragin could say nothing. He had seen their cloaked captor give a demonstration of raw power. And here was its counterpart at the other end of the ultimate in mastery—unvarnished, positive control.

They owned a universe, and were its architects as well.

"Ten million miles wide!" the girl breathed.

"A light-year long if it's a foot," Cragin said in a low voice. "And at the end—"

THEY watched as the pattern shifted; the dots grew larger until they were coruscating balls of white flame. And then, with a majestic slowness, the entrance to the gateway became a static, unchanging picture of unprecedented geometric symmetry.

"It's—we've stopped," the girl said.

"Cut our gun, that's all. Probably waiting for clearance to enter. The whole damn fleet of us."

"It's—it's pompous ridiculousness!" Her

voice was edged with frustrated anger and it mounted as she spoke. "A gate-way, a show-piece—a stupid affectation of the ultimate in egocentricity! With or without their little pathway, there's all of Space from which to make an approach—"

"I doubt it, princess. Outside this little welcome-mat I'll bet my pilot's papers there's a destructive field of some kind that'd blast the dye out of your hair at ten light-years. One gets you a thousand that this is the only way you get to see the top brass. And you don't do that without an O.K. from a big somebody."

The minute hand on Cragin's wristchron made seven complete circuits before the gateway again began expanding to receive them on the telescreen.

And then they were past its opening, and hurtling headlong down its great length at what Cragin knew must be a speed which, although no longer requiring flight by comptometer, would have taxed his skill to the utmost.

He and the girl watched the telescreen in silence for minutes, watching the pin-points of light on either side grow from minute flecks in the blackness to great spheres of flame within so many seconds, and then pass. . . .

"Look!"

"Yeah, it's a great show. But—hell! It couldn't be a—"

The scintillating point of light which lie dead ahead, in the exact center of the gateway and at its extreme end, could not, Cragin realized, be a planet. Unless it were a perfectly polished reflector, it could not show so much like the miniature stars at either side.

It was a star, itself.

"It must be just illusion," he said evenly. "It's got to be."

"Oh no," Lin Griffin said. "Of course they live in the center of a star! They rule all, don't they? They're the great masters of all creation, aren't they? Certainly you don't think your great masters would live on anything so simple as a mere planet! But of course they live where the temperature is only several billion degrees—"

She began laughing and Cragin slapped her across the face.

"Cut it, kid, CUT IT!"

There were tears coming from her eyes and her face remained in the twisted contortions of hysteria even after her voice had become soundless.

She pulled away, and Cragin left her to herself. In a little while she began to cry and he could hear her sobbing above the even hum of the telescreen, but he left her alone.

And he knew one thing. It *had* to be illusion. Damn it, Owners or not, no matter what the hell they were, it had to be illusion!

Cragin had never felt shaken through to the inside of him before. Fear and awe had been banished from the minds of men for five centuries. Yet he felt as though he were staggering blindly, and he knew he was helpless.

The pin-point had become a searing, blinding thing, and even as he shielded his eyes, it filled the screen. They were going into it.

Into it.

Into a live star.

No, was the only word he could think. No.

NO!

He spun away, wrenching the telescreen off as he did so.

But nothing changed, and he did not die. Somehow, there was no change at all.

He sat upright, rigid, as though self-hypnotized for what could have been hours or minutes. And there was no change, no awful, searing wave of white heat, no last instant of torture before death.

Simply, suddenly, a light jar.

And Cragin wondered sardonically if his small rectangular bit of enamelite would be at all impressive on the planet the Owners called home.

**N**EITHER Cragin nor the girl ever saw the planet as such. And it was a planet, Cragin learned, a planet little larger than Earth, honeycombed with subterranean tubes and chambers as had been the control point; a labyrinth which contained a civilization of little more than twenty million members; a headquarters for those who ran and owned the universe.

They were escorted to the testing place by two creatures of the fourth grade; bipeds,



shorter than men, with hunched backs and splayed tentacles for arms and hands. Cragin noted that they carried armament of a sort; simple tube-like objects which were aimed at him while he was relieved of his Krells.

Then he and Lin Griffin were placed in a bullet-shaped vehicle, one of the guards operating its controls and the other stationing himself behind them.

Cragin was not prepared for the girl's sudden outburst and jerked his hands vainly at the empty holsters at his hips.

"Of course we can escape from these simpletons!" she cried. "We can easily overpower these dimwitted brutes—"

"There was no reaction from their guards; Cragin's hands relaxed slowly.

"What—"

"Don't you understand? They're fourth grade—two less than our cloaked friend. They are our guards, so of course our superiors in intelligence, but still not on a high enough plane to interpret the emanations of pure thought as he was."

"You'll do, I guess. But I've still got a feeling that if either of us twitches an eyebrow—"

She continued as though he had not spoken. "He took your guns; we're now held prisoner under weapons. They have to rely on material means of power. Look, Cragin!"

Highly-polished curved metal walls of an alloy comprised of ores that he could not begin to identify flashed past at such speed that all sensation of motion was negated. There was no sound.

"I'm looking."

"It's a safe bet the tests will be something devised by the Owners themselves. Something that will measure our total thought potential—something based on an extremely advanced function of psychometrics."

"You're over my head again."

"If we're acceptable, Cragin, we're established in one grade or another—and will be constantly under the supervision of creatures of the next highest grade—that's the way it's been working so far, with the exception of the little excursion we're taking now."

"In other words—"

"In other words, we've got to think in the simplest patterns possible. Childish

things. Anything that will belie our true intelligence level. What's your I.Q.?"

"I didn't ask you how old you were, duchess, but I test out at an embarrassed 158 or so."

"We match within ten points. It'll have to do. Because we've got to fake—test out at about 115."

"Like I say, you'll do. Testing out at 115, our bosses on the next level shouldn't be a shred above 130 or so. So—"

"So we've got them by almost a 30-point margin. We'll be in a position to out-think our immediate guards, and perhaps even those over them. It's our only hope."

"Mental imposters. . . . You just forgot one little item, honey."

"Oh of course. They're the masters of all, so there's no possibility that a mere human—"

"Take it easy. I didn't say it's no go. Just wondering if 115's are acceptable. If not, you know what happens. We go to the bottom of the class never to rise again. Maybe even 160's aren't eligible. Remember, the control points are hidden relative to the mental ability of the civilizations whose planets they control. Only people who exceed the Owners' estimate—"

"If they control our system, they control billions of others—we were told that. Some higher, some certainly lower. And we did discover the point."

"You and your father. I never would have."

"Look, Cragin. It's the only chance there is. But if I fake and you don't—"

"Yeah. You think it'll work?"

"I don't know."

"But you'd rather die, that it, than be a knowing slave to another civilization, even though it is undisputed master of—"

"That's why I'd rather die, Cragin! Because they're false masters!"

He didn't reply. She was confusing him again, and perhaps the basic reason for the confusion was that he didn't understand why she mixed him up. If there was anything Earth's culture stood for, it was the integrity of the fact—maturation and development of the individual through strict adherence to the known. Only the proven fact was worthy of belief and acceptable as a basis for thought. Nothing else.

But the girl wasn't behaving that way.

"All right. We gamble that an IQ of 115 is acceptable. Then we gamble that we can effect a break. In other words we just take a chance on a chance; make a really long shot out of it."

"Will you, Cragin?"

He laughed a little. Hell, sooner or later, anyway—

"Hand me my rattle," he said. "I better practice. The asteroids are falling down, falling down; the asteroids are falling down, my fair lady . . ."

## V

THE panels to two adjacent chambers were open.

"Guess they don't trust us together," Cragin said. The dark blue plastiglass of his Patrol tunic dully reflected the subdued half-light that emanated into the tube-like corridor from beyond the panels. Like a nightmare, he kept telling himself, like a nightmare. Impossible impossible impossible. . . .

Her face was the color of white sand, and it was the only indication that she understood.

"Please try, Cragin."

"Sure."

"You want to try . . ."

"It's a cinch I can't arrest 'em, princess. And I know you want out. You want to sink 'em all and so do I. If there's any way, believe me—"

Cragin knew he would not forget the look etched in the thin white lines of her face as she was led into the testing place; there was something in it that he had never seen before in the face of an Earthman. Not an expression caused purely by reflex in time of danger or pain; not one carefully controlled after finding an unpleasant solution to an inescapable problem. Neither of those. But what others. . . .

Cragin looked then to what he might be more successful in understanding. The testing place which had been readied for him was a small, independent laboratory, much like the control room of the machine planet, save for the complete absence of telescreens. And awaiting him were two cloaked figures in red mail—technicians, second grade. The

Owners were taking no chances.

He lay at full length on a sheet of metal that was as comfortably resilient and warm as an old-fashioned bed of feathers, and waited expectantly.

"Are you prepared, Earthman?"

"Fire away, braintrust." He wondered at the absence of equipment. Nothing was attached to him—no electrodes, none of the usual electroencephalographic devices. There was only a low hum, and the pale glow from the indistinct walls about him.

"The test begins, Earthman. Display your mind as you see fit."

The hum deepened. The walls became more indistinct, and the glow somehow became a part of the sound that filled the tiny chamber.

Cragin flashed his mind to his first years of schooling. He had been 10 years old, had learned the square of the hypotenuse is equal to the sum of the squares of the two opposite sides . . . "i" represents the square root of the quantity minus one, and is termed an imaginary number . . . for every action, there is an opposite and equal reaction. . . .

He lost all sense of time, and guarded against thinking of it, lest he betray even a basic knowledge of continuum dynamics. Had to keep it simple, child-like, simple. . . . The intensity of light diminishes inversely as the distance from its source is squared.

The voice inside his head was at length the signal that the test was completed.

"From this examination, Earthman, it is evident that you stumbled where you did purely by accident, and that the craft in which you traveled was out of control, operating entirely beyond your understanding."

Cragin kept his thoughts diffuse and made no effort to reply.

"Do I serve or die?" he asked at length.

"On a probationary basis, you serve. Grade, twelfth."

The test was done, and Cragin had won the first cast of the dice.

The ruse had worked, Cragin knew, not because the Owners and their test had been outwitted but because the test itself had been logically constructed to measure the level of a mind which was functioning at its maximum. The trick was based on folly

—folly in which higher level intelligences would not indulge, and which lower ones would not recognize as a gamble for higher stakes than slavery. Cragin knew he would not have indulged in it had the chance been up to him alone.

What surprised him of course was that so far it had worked. And it made Lin Griffin all the more mystifying, almost inscrutable. Theoretically, she should have dismissed such a plan as ridiculous. But logic and the theory upon which it was based, and what Lin Griffin did, were two different things. Cragin tried to put the puzzle from his mind. And the girl. The probabilities were against his seeing her again. And that, for reasons as puzzling as the girl herself, made him peculiarly miserable.

**O**THER slaves from a hundred other civilizations, ranging from the shape of a man to shapes that Cragin could not identify with his three dimensional senses had been packed into the hull of the spacecraft with him; they were all of his assigned grade, and therefore would constitute little problem. He could tell by their reactions to outside stimuli that he was their mental superior.

The pilot might be a different matter. He carried arms much resembling his own Krell guns, judging from their outward appearance of construction and functional design. But there was one thing—they had a fixed grip, like the ancient pistols of Earth. It meant they could be used from only one hold, and indicated that they were copied from the product of a civilization perhaps a hundred years behind his own. But perhaps his slim margin of advantage would be enough.

A cloaked and red-mailed servant of the second grade had briefly addressed the group prior to take-off, and for moments Cragin had feared that he would accompany the consignment. But he had not.

The voice had simply said, "New servants of the Owners, you are about to be transported to your place of work. As servants of the twelfth, and lowest, rank, your duty will be the mining of unconsumed zronon, employed by the Owners to maintain their home and their glorious gateway on an equal level of brilliance to that of the

stars themselves. Death awaits that servant who lags in his output. Your destination will be the eighth mining planet, nearest the edge of the Trespass Limit. It was once, like all other mining planets, a live star, extinguished and cooled by the Owners that its highly precious and combustible substance be turned to their own desired ends.

"Are there any for whom this directive has not been reduced to sufficiently simple terms?"

There was silence.

"Very well. Be it remembered among each of you that the Owners, those who near the goal of the creation of life, and who are long since the masters of death, command you."

Then it was over, and Cragin waited in the hot, dank hull, sweating inside his helmet, in which there was an endless supply of his own unique atmosphere. His own helmet, because it was far from being so perfect, had been taken from him upon completion of the test. Such was the case with each of the others, and the textures and colorations of the stuff they breathed or absorbed was as varied as the planets on which they were spawned. And there was hardly any helmet of the same shape or design as another.

The waiting did not last long, but Cragin's plan was in his head as completely as he could fashion it when he felt the landing jar. If it were to work, it would be executed with split-second speed and precision, or again, the alternative would be destruction. It was evident that to use his advantage to the utmost, it must be coupled with the dual advantages of immediacy and surprise.

The airlock opened; with the rest, Cragin filed through it. He took glancing note of the positions of the few guards; kept their pattern of surveillance stenciled in his memory.

The file was split—a quick maneuver placed him at the end of his own section as it was led to the opening of a shaft even darker than the leaden twilight which hung low like a weighted shroud over the entire sphere.

It would be in a moment, or a month, or a year. . . .

The slave ship had not prepared yet for take-off; its tubes smoked lazily, cooling.

A month, even a day, would be too long. If it was to be attempted at all, it was to be NOW.

AND Cragin had the squat guard on a grip which broke his spine before his heart had time to beat again. The gloom helped; the din that issued dully from the mine's lower levels covered the near silence of the death which Cragin had meted out. The weapon was the guard's only insigne of identity, and Cragin had it cradled in his own arms before the thick, broken body hit the ground.

Then he ran, laboring against a slightly stiffer gravity than his Earth-muscles had been born to, waving the weapon above him with all the strength he had!

Toward the ship and its smoking tubes—gesturing, pointing toward the cave-mouth, and yelling his head off, wondering how closely the time-lapse would match between the time he reached the ship and the other guards, even now running their first steps toward the cave mouth toward which he pointed, would realize that although he was giving alarm, he was running away from, not toward, the indicated trouble point.

He was within the airlock by the time the first guard to answer his cry of distress had taken twenty running steps, and had, upon taking the twenty-first, realized that Cragin was going in the wrong direction. But the margin had been enough—

The lock slammed shut.

The pilot, returning to his control panels from the brief recess he had taken elsewhere in the ship, only saw Cragin for as long as it took the Earthman to unleash the weapon he had captured. There was a flat explosion, the weapon bucked uncomfortably, and the pilot died with a large, blue hole through what Cragin took to be his head.

There was only one more thing left to logic, and the rest—

For the second time in his life since he had met Lin Griffin, he wondered what, if something there was, might lie beyond logic.

The simplified control panel resembled something that might have been manufactured in Earth factories half a century before. It had been obviously designed for the

capabilities of the servant-pilot to whom it was assigned. If only she had the guts—

Cragin blasted off, and twisted the speed-control full on.

The Trespass Limit would shatter him, of course. Or within moments at least, the death which the Owners themselves controlled would seek him out. Unless . . .

He could not understand the symbols, but he knew the acceleration and velocity needles were going crazy—they were deep in a red-hued band and nearing its limit.

Even through the inverse inertia field, Cragin could feel the thrust of the terrible acceleration and then—

There was a click.

A hum which rose within seconds to a high shrill followed it and then another click came, another hum, then going up the scale.

Such sounds could be only from—  
**COMPTOMETERS!**

Cragin spun a telescreen control, a mad laughter welling from within him, bursting through his blood-flecked lips, shaking him uncontrollably. There was blackness! The gateway, gone—the great, star-like home of the Owners, vanished! Somehow, he was out!

A critical speed, and the comps going like crazy!

Cragin laughed and laughed until he fell unconscious.

## VI

IT HAD been, as closely as he could tell, nine years.

Nine years of aimless—no, helpless, wandering from planet to planet, from sun to sun, flying tight rope between countless dimensions, following his fantastic escape from the realm of the Owners. He should feel excitement now; should want to laugh until he deafened himself because even now, swimming palely in the field of his forward electronoscope was the solar system, his system; HOME.

Luck, chance, whatever you wanted to call it, he was home. Stumbled on it, of course, as he had stumbled his entire way the length, depth and time of all creation. He should laugh, but there was no strength for laughter. There was just a tranquil kind

of acceptance, a mould of thought into which Cragin had long since forced his mind, in order to retain his sanity as he ran the never ending gamut of change which was the very fabric of the infinity in which he had plodded.

Home.

A place of torture and of slow death, but at least a place where he might die among his own kind.

Had he not been barely minutes through the Barrier with the comptometers still warm, the insistant radar signal wouldn't have been worth its interruption of his thoughts.

But anything so close to the Barrier demanded at least cursory investigation. He flicked a radar panel relay to TRACK.

The object's speed was building up. It was without a doubt a controlled acceleration. No school kid could fail to recognize a comptometer-regulated trajectory. Within seconds his fingers were flicking across a three dimensional plot check.

*Headed for a Barrier-bust!*

Cragin checked the comps back in, mentally replotting a new trajectory of his own for them to pick up as he did so. As his hurtling craft entered a sliding, almost too-closely cut parabolic reversement, he cut in his com-beam.

"This is Cragin, Stellar Patrol, please ack, whoever you are. You are heading for the Barrier. You must alter course. You have not more than three minutes. Acknowledge please if you read me."

He waited, wondering. There was no answer, just the emptiness of the void echoing hollowly to the eternal half-whisper of Infinity.

But—the track altered! The ship was slowing, curving off! Forty seconds went by, and it had gone into an oblique drift.

For the first time in nine years there was a sweaty feeling in the palms of his hands, in the stubble of his upper lip. He cut his comps out, hauled his ship into a parallel-ing trajectory, then angled a gradual interception path.

"This is Cragin," he repeated. His voice felt husky as though he had not used it for a century. "I am friendly. I intend no trouble. It is for your safety that I request permission to board you. Have information

essential to your flight . . ."

There was no ack. He had his space-helmet dogged tight as he slid alongside the slender, dark-hued craft whose jets had been choked to the lazy, red-hued combustion of idling speed, and reached for his Krells. He hesitated, let them remain hanging on the bulkhead. He had said he was coming as a friend.

He flicked a single A-intensity magnetic tractor to the craft that seemed to float motionlessly beside his own, scrambled along it on his spacesuit's mag-unit, and was still perhaps five feet from the smooth side of the silent ship when an airlock growled open to receive him.

Once shut behind him, he tried to trace a million half-finished thoughts as the lock chamber cycled up to pressure.

Who was in here? Scientists who had long since learned the secret of the Barrier? Hardly, or his warning would have gone unheeded save for a polite acknowledgement. Who then—another explorer as Fowler Griffin had been? Or someone else who had stumbled onto the presence of the X Ecliptic and the machine-planet?

Or some alien flightmaster of some foreign universe who was either exploring or lost, as he had been lost. . . .

A blue light flashed the intergalactic symbol for PRESSURE and the inner lock slid back.

THE small control room was illuminated only with the soft wash of light emanating from the compact but complete instrument panel—an instrument panel at once strikingly similar to that of his own ship. A figure turned to meet him—

There were 40 years etched into a countenance that should have borne barely the hint of nine. The sag of the narrow shoulders told of the soul-breaking exhaustion that reflected dully from the sunken eyes more eloquently than the straight, bloodless mouth could ever have told. The gray lips were almost motionless as they parted.

"Hello, Cragin," Lin Griffin said.

"Greetings. My name is Randolph Cragin, Stellar Patrol. Your cooperation is appreciated, and was requested inasmuch as it is my duty to—to . . ."

The light was so uncertain, yet—there

was something about the face. The forehead—deep within the eyes—

"Yes, Patrolman?"

"No," was all he could find to say. "No." He watched in an agonized disbelief as the suggestion of a smile mingled with the shadowed wrinkles of her ashen face.

"Even as yourself, Cragin, I—cluded them. It took this long, for a woman lacks the ready brute strength which so often turns impending defeat into quick victory. I am glad that you were successful, that you're alive. It was worth heeding your call to see you again."

"But I—I thought they. That is after I escaped they—their anger could have taken only one direction."

"It was not anger, precisely. Just—shall we say, a rather intensive increase in police efficiency? No, it was not anger. Mine was the anger. But now—" She hesitated, turned her eyes toward the instrument banks, then back to his. "Now I've got the high cards, Patrolman." There was a subtle change deep within the sunken eyes, as though a smoldering candle flame had suddenly become a tiny bit of polished steel glinting in the rays of a new sun at noon. "But this time, don't follow."

"I don't get it. Somehow you're still alive. But somehow—well, you—"

"Aged? Gotten old? Don't be afraid to say it. The vibrokey did most of it. Residual effect. It has potentialities that I'm sure even father never dreamed of."

"Vibrokey? I don't—"

"Think back. Remember how I located the entrance to the machine planet, how I opened it? How I told you that father had said that it could shake whole buildings down? How I explained that it experiments with all possible combinations and magnitudes of vibration speeds and patterns until any assigned pattern is matched—"

Cragin scowled a little. Something stirred stealthily in his memory, and then the whole thing crept slowly back, piece by piece.

"You mean you slammed your way out with that gadget?"

"In a way. The one my father made was of course taken from me and destroyed. But I had helped him build it; I knew I could build another. But I had to steal what bits and pieces of materials I needed whenever

it was possible. Sometimes I waited months for an opportunity, only to lose it at the last moment. Yet the waiting helped in its own way. Even as I slaved for them, Cragin, I thought, I figured, refigured. And when, after seven years, I had accumulated the few simple parts I needed, I knew I could build a better instrument than Fowler Griffin himself had."

"And you built it—"

"While the others slept and the guards ate. That took almost two years."

"Then?"

"I vibrated a guard into senility. He died of old age within seconds. In what simple uniform he wore and with his weapon, I bluffed my way aboard this ship in which we stand now. I had to kill a pilot and three crewmen before I was successful in tuning the key to a dimension existing in a completely different pattern of atomic vibrations. The transferal itself was instantaneous. Then on critical speeds I found my way back."

Cragin took a deep breath. "And you once told me I was impossible. But just the same I don't want to be kidded, even if you have got more circuits upstairs than I can ever be wired for. Remember I didn't pick you up going *toward* home. The nose of this barrel was about to do a little Barrier-busting."

The faded smile returned to Lin Griffin's age-contorted face. She had not been completely immune to the device of her own making; even her brilliance had been unable to devise a vibration scheme which would resolve to zero the reaction effects of dimension transferal through alteration of atomic vibration patterns.

"I wanted to see Earth again, Cragin. I don't know if you understand that or not. Love is a common word, but few understand it."

"Our people, advanced in scientific knowledge and wisdom as they are, had long since forgotten it when we first met. It was seldom in their past that their faith was placed wholeheartedly in it. But they're my people just as they're yours, Cragin, and I love them because they are. And that's why I'm on my way to take over the machine-planet; to destroy it. To destroy it so that it can never be replaced."

"You aren't making sense, gal."

"I am, Cragin. Because Owners or no Owners, the Earth—the entire system and the universe in which it lives—have true physical and chemical values of their own—values determined in the very beginning by an entity far higher than they!"

"You mean you actually believe—"

"I do and I'm proud of it!"

Cragin felt his face grow warm, knew he reddened, was not sure why. He felt a strange compulsion to turn his eyes from hers. Mad? Easily said, of course, but—No.

No. Not mad at all.

"I may understand more than you think, Lin Griffin. I am human."

There was a moment's silence. Then, as though she had not heard him, she spoke rapidly.

"Once returned to the X Ecliptic, Cragin, I shall set the vibrokey adrift within its circumference, to set up a vibration field which will negate any form of other energy, including counter-vibrations, and which will mean complete destruction to any form of matter. I intend to activate the key from the machine-planet itself with nothing more complex than a simple radar beam, after I have restored the solar system to its original values."

"That'll mean everything within the Ecliptic will be destroyed; the machine-planet; you too. You're telling me you don't mean to come back. I can't let—"

It was as though she was totally deaf to each word he said.

"I don't believe in the Owners as masters of all, Patrolman, despite their extreme advances in the realm of both pure and applied science. You do. You do, because they symbolize the scientific ultimate. . . . But science was only ever meant to be a useful tool for men. Not their God."

Cragin felt funny inside.

"You'll die," he said like a child.

"But you shall not. You shall live. Such a thing," she said, "has been done before for the peoples of Earth.

"Now go, Cragin."

There was nothing else to do.

He paused. His wide shoulders sagged

a little; he was not given to long talk, and he had discerned the signs of restlessness among a few of the impassive assemblage. Others were more kind. Little else, perhaps, could have been expected.

"As I confessed when I began," his quiet voice resumed, "I do not have many of the scientific answers you want. Hints that Lin Griffin gave me before her last trip beyond the Barrier—they are all I have to explain why the solar system is as you see it now; altered, changed, alive.

"Unless, gentlemen, you would accept a better answer; one that Lin Griffin herself might have given you. She would tell you that there is more to the Universe—the macrocosmo and the microcosmo as well—than Man has yet measured. To speak of Universe means, gentlemen, to speak not only of its known contents, but of its unknown as well, for it is eternally the container of both.

"Logically, I should have met death in my attempt at escape. Logically, no human woman could have endured what Lin Griffin endured, nor conceived the strategy with which the machine planet was erased from existence. According to the logic of the last five centuries of human culture, what Lin Griffin did, how she thought, were both impossibilities.

"Yet Earth is green again.

"So when next you seek to plumb the Universe, gentlemen, and to equate yet one more of its myriad unknown quantities, think again of the half-gods, such as the Owners—such as we ourselves strove so mightily to be—who would equate them all. For it is always inevitable, gentlemen that soon or late, though the Universe remains, the half-gods go.

"There are some, I believe, who would seek too high an office. You—you may thank God, gentlemen, for the few who will not let them."

Then Cragin's voice at last fell silent, and silently, he stepped from the podium.

The time was five o'clock, Sunday, June 9, 3024, and from somewhere far off there was the gentle sound of a tolling bell.