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COMPLETE SHORT NOVEL

RESEARCH ALPHA by **A. E. VAN VOGT**
& **JAMES H. SCHMITZ** **6**

NOVELETTE

THE FUR PEOPLE by **D. M. MELTON** **62**

SHORT STORIES

THE LAST EARTHMAN by **LESTER DEL REY** **56**

IN OUR BLOCK by **R. A. LAFFERTY** **77**

SERIAL

SKYLARK DuQUESNE by **E. E. SMITH, Ph.D.** **83**

FEATURE

EDITORIAL by **FREDERIK POHL** **4**

Cover by McKENNA from THE LAST EARTHMAN

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Concerning Worms and Serpents

Some years ago *If* published a story by James McConnell called *Learning Theory*. It had to do with a man who finds himself running a maze; he has been abducted from Earth by some more potent and intelligent creatures whose principal interest in Earthmen is in seeing if we are intelligent at all. So they put our hero to the standard tests that we humans give to guinea pigs, mice and worms.

It was a good story. Indeed, it had every reason to be. Not only was (and is) McConnell a first-class writer, but in his incarnation as Dr. James V. McConnell he is professor of psychology at the Mental Health Research Institute at the University of Michigan — and thus an old maze runner from way back.

McConnell's mazes are most usually being run by planarian worms; in fact, you might say that every bit of the stature and dignity that planarian worms have in the eyes of science today is due to the efforts of Jim McConnell. Until a few years ago, nobody paid much attention to planarians. They are neither particularly pretty nor particularly smart. But they do learn — sort of. At least, they are capable of acquiring a Pavlovian reflex if you know how to go about handling them.

Suppose, for example, you give a planarian a mild electric shock.

He will respond by contracting slightly.

If you simultaneously apply electric shock and bright light, and repeat them together often enough — oh, let's say forty or fifty times — then something happens in the worm's nervous system that is something like learning. He begins to associate shock and light, and reaches a point where he will contract if you give him just the light. He has learned a response.

All right; so far so good; but Pavlov did the same thing with dogs and bells half a century ago. What makes the planarian the celebrity he is today is that if you then take a highly trained, light-reacting planarian; chop him up into small pieces; feed him to another, totally untrained planarian . . . and if you then give the second planarian, the cannibal one, the same series of stimuli . . . why, then the second planarian learns the shrinking lesson in only perhaps a dozen tries instead of forty or fifty.

In other words, some part of the "memory" of the cannibal planarian was acquired through his digestive system. He has eaten himself an education.

This is fact, not joke. But there are jokes in Jim McConnell too, and one of the evidences of his sense of humor is the scientific journal

he has been publishing on and off for nearly ten years, called *The Worm Runner's Digest*.

The *Digest* may not be the most important technical periodical being printed today, but it may well be the most widely read. It's certainly the funniest. And what brings all this to mind at this time is that the publishing firm of Prentice Hall has just had the wisdom to get McConnell to put together an anthology of the best from *The Worm Runner's Digest*.

The title of the book is *The Worm Re-Turns*. We enjoyed it. You will too!

McConnell's planarians are an example of scientific fact that sounds like a hoax. A gallery of scientific hoaxes that sound like fact, on the other hand, is in Robert Silverberg's *Scientists and Scoundrels*, just out from Crowell.

As Silverberg says in his introduction, "This is, in a way, a book of science fiction—or at any rate, a book of fictional science." Among his scientists and scoundrels are accounts of Atlantis-hunters and sculpture-forgers; of the Great Moon Hoax that had all America looking toward alien intelligences in the sky a century before science-fiction magazines ever appeared; and of that most impressive of flimflams, the Piltdown Man. If you are going to play a practical joke, that is the scale to play it on! Whoever joined man's cranium to ape's jaw, pickled the mixture in aging solution and passed it off as an authentic fossil, is surely still laughing in some unmarked grave.

Still, we would enter a demurrer or two against some of Silverberg's charges. Item: Silverberg says flatly that Dr. Cook never reached the

North Pole and that it was all a hoax concocted for the sake of fame and profit. We're not so sure. (We should point out, by the way, that the Frederick J. Pohl mentioned in Silverberg's book as supporting Cook's claims is not the undersigned, but an older and undoubtedly wiser Pohl; coincidentally, we are more of this other Pohl's view on this matter than of Silverberg's.)

And this same Frederick J. Pohl, as it happens, introduced us some years ago to a man named Hjalmar Holand, who Silverberg thinks was a well meaning but credulous character, taken in by some forged archaeological evidence and persuaded that the Vikings a thousand years ago left carved runes on a stone in Minnesota.

Holand may well have been wrong. It is hard to see just how Vikings could have got that far inland—or why—or what became of them if they did. But credulous Holand was not, nor was he anybody's dupe.

As to how the Vikings got there, Holand wrote a fictional account of their journey in a wondrously interesting novel which we read in manuscript and hope someone will sooner or later have the wit to publish.

As to what they were doing there—well, we know one thing about the Vikings: Anywhere they could go, they did go. And as to what became of them . . . that's hard to say; but one thing Holand told us that bears on that is the persistent, and otherwise inexplicable, Minnesota tradition of a tribe of blue-eyed Indians who lived in that area in the early nineteenth century!

But Silverberg's book is fun anyhow . . . — THE EDITOR

RESEARCH ALPHA

by A. E. VAN VOGT & JAMES H. SCHMITZ

Illustrated by GAUGHAN

The aim of the experiment was only to make a superhuman. It succeeded far beyond that goal!

I

Barbara Ellington felt the touch as she straightened up from the water cooler. It was the lightest of touches, but quite startling—momentary, tiny flick of something ice-cold against the muscle of her right arm at the shoulder.

She twisted quickly and rather awkwardly around from the cooler,

then stared in confusion at the small well-dressed, bald-headed man who stood a few feet behind her, evidently awaiting his turn for a drink.

"Why, good afternoon, Barbara," he said pleasantly.

Barbara was now feeling embarrassment. "I..." she began incoherently. "I didn't know anyone else was near, Dr. Gloge. I'm finished now!"

She picked up the briefcase she had set against the wall when she stopped for a drink and went on along the bright-lit corridor. She was a tall, lean-bodied girl — perhaps a little too tall but, with her serious face and smooth, brown hair, not unattractive. At the moment, her cheeks burned. She knew she walked with wooden, self-conscious stiffness, wondering if Dr. Gloge was peering after her, puzzled by her odd behavior at the water cooler.

"But something *did* touch me," she thought.

At the turn of the corridor, she glanced back. Dr. Gloge had had his drink, and was walking off un-hurriedly in the opposite direction. Nobody else was in sight.

After she'd turned the corner, Barbara reached up with her left hand and rubbed the area of her upper arm where she had felt that tiny, momentary needle of ice. Had Dr. Gloge been responsible for — well, for whatever it had been? She frowned and shook her head. She'd worked in Gloge's office for two weeks immediately after she'd been employed here. And Dr. Henry Gloge, head of the biology section at Research Alpha, while invariably polite, even courteous, was a cold, quiet, withdrawn character, completely devoted to his work.

He was not at all the kind of man who would consider it humorous to play a prank on a stenographer.

And it hadn't, in fact, been a prank.

From Dr. Henry Gloge's point of view, the encounter with Barbara

Ellington in the fifth floor hallway that afternoon had been a very fortunate accident. A few weeks earlier he had selected her to be one of two unwitting subjects for Point Omega Stimulation.

His careful plans had included a visit to her bedroom apartment when she was not there. He had installed equipment that might be of value later in his experiment. And it was not until these preliminaries were accomplished that he had headed for the steno pool, only to find that Barbara had been transferred out of the department.

Gloge dared not risk inquiring about her. For if the experiment had undesirable results, no one must suspect a connection between a lowly typist and himself. And even if it were successful, secrecy might continue to be necessary.

Gloge chafed at the delay. When on the fourth day of his search for her he suddenly recognized her walking along a hallway fifty feet ahead of him, it seemed as if fate was on his side after all.

As the girl paused at a water cooler, he came up behind her. Quickly, he made sure that no one else was in view. Then he drew the needle jet gun and aimed it at her shoulder muscles. The gun carried a gaseous compound of the Omega serum, and the only sign of a discharge, when he fired it, was a thin line of mist from the needle end to her skin.

His task then accomplished, Gloge hastily slipped the instrument into the holster inside his coat and buttoned his coat.

Barbara, still carrying her briefcase, presently came to the offices of John Hammond, special assistant to the president of Research Alpha, which lay on the fifth floor of what was generally considered the most important laboratory complex on Earth. Alex Sloan, the president, was on the floor above.

Barbara paused before the massive black door with Hammond's name on it. She gazed possessively at the words *Scientific Liaison and Investigation* lettered on the panel. Then she took a small key from her briefcase, slipped it into the door lock and pressed to the right.

The door swung silently back. Barbara stepped through into the outer office, heard the faint click as the door closed behind her.

There was no one in sight. The desk of Helen Wendell, Hammond's secretary, stood across the room with a number of papers on it. The door to the short hall which led to Hammond's private office was open. From it Barbara heard Helen's voice speaking quietly.

Barbara Ellington had been assigned to Hammond — actually, to Helen Wendell — only ten days before. Aside from the salary increase, part of her interest in the position had been the intriguing if somewhat alarming figure of John Hammond himself, and an expectation that she would find herself in the center of the behind-the-scene operations of *Scientific Liaison and Investigation*. In that, she had so far been disappointed.

Barbara walked over to Helen Wendell's desk, took some papers

from her briefcase, and was putting them into a basket when her eye caught the name of Dr. Henry Gloge on a note in the adjoining basket. Entirely on impulse — because she had seen the man only minutes before — she bent over the paper.

The note was attached to a report. It was a reminder to Hammond that he was to see Dr. Gloge today at three-thirty in connection with Gloge's Omega project. Barbara glanced automatically at her watch; it was now five minutes to three.

Unlike most of the material she handled, this item was at least partly understandable. It referred to a biological project, "Point Omega Stimulation." Barbara couldn't remember having heard of such a project while she was working under Dr. Gloge. But that was hardly surprising—the biological section was one of the largest in Research Alpha. From what she was reading, the project had to do with "the acceleration of evolutionary processes" in several species of animals, and the only real information in the report seemed to be that a number of test animals had died and been disposed of.

Was the great John Hammond spending his time on this sort of thing?

Disappointed, Barbara put the report back into the basket and went on to her own office.

As she sat down at her desk, Barbara noticed a stack of papers which hadn't been there when she had left on her errand. Attached to them was a note in Helen's large,

clear handwriting. The note said:

Barbara,

This came in unexpectedly and must be typed today. It obviously will require several hours of overtime. If you have made special arrangements for the evening, let me know and I'll have a typist sent up from the pool to do this extra work.

Barbara felt an instant pang of possessive jealousy. This was *her* job, *her* office! She definitely did not want some other girl coming in.

Unfortunately, she did have a date. But to keep an intruder from taking her place in John Hammond's office, even if only for a few hours, was the more important matter. That was her instant decision, needing no second thought. But she sat still a moment, biting her lip; for that moment she was a woman considering how to put off a male who had a quick temper and no patience. Then she picked up the telephone and dialed a number.

For some months now, Barbara had settled her hopes for the future on Vince Strather, a technician in the photo lab. When his voice came on the telephone, she told him what had happened, finished contritely, "I'm afraid I can't get out of it very well, Vince, so soon after starting here."

She could almost feel Vince absorbing the impact of the denial she was communicating; she had discovered quickly in their brief romance that he was trying to move her towards premarital intimacy, a

step she was wholly determined not to take.

She was relieved now, when he accepted her explanation. She replaced the receiver, feeling very warm toward him. "I really do love him!" she thought.

It was a few moments later that she suddenly felt dizzy.

The feeling was peculiar, not like her usual headaches. She could feel it build up, a giddy, light swirling which seemed both within and without her, as if she were weightless, about to drift out of the chair, turning slowly over and over.

Almost simultaneously, she became aware of a curious exhilaration, a sense of strength and well-being, quite unlike anything she could remember. The sensations continued for perhaps twenty seconds ... then they faded and were gone, almost as abruptly as they had come.

Confused and somewhat shaken, Barbara straightened up in her chair. For a moment she considered taking aspirin. But there seemed no reason for that. She didn't feel ill. It even seemed to her that she felt more awake and alert.

She was about to return to her typing when she became aware of a movement out of the corner of her eye. She looked up and saw that John Hammond had paused in the doorway of her little office.

Barbara froze, as she always did in his presence, then slowly she turned to face him.

Hammond stood there, staring at her thoughtfully. He was a man about six feet tall, with dark brown



hair and steel gray eyes. He seemed to be about forty years old and he was built like an athlete. Yet it was not his appearance of physical strength but the fine intelligence of his face and eyes that had always impressed her during the ten days since she had been assigned to his office. She thought now, not for the first time: "This is what really great people are like."

"Are you all right, Barbara?" Hammond asked. "For a moment, I thought you were going to fall out of your chair."

It was highly disturbing to Barbara to realize that her dizzy spell had been observed. "I'm sorry, Mr. Hammond," she murmured shyly. "I must have been daydreaming."

He gazed at her a moment longer, then nodded, turned and walked off.



II

On leaving Barbara, Gloge went down several floors and stationed himself behind a pile of shipping crates. These were in a passage across from the locked door of the main photo lab storeroom. On the dot of 3:15, a door farther along the passage opened. A lanky scowling, redheaded young man wearing

a stained white smock over his street clothes, pushing a loaded handtruck ahead of him, appeared and turned down the passage towards Gloge and the laboratory storeroom.

It was the end of the lab shift. Gloge had discovered that one of the regular duties of Vincent Strather, Barbara Ellington's boy friend, was to return certain mate-

rials to the storeroom at this hour.

Peering through the slats of a crate, Dr. Gloge watched Strather's approach. He was, he realized, much more tense and nervous now than he had been when he had given Barbara the injection. Of himself, Vincent Strather was not the kind of subject Dr. Gloge would have chosen — the young man was too angry, too bitter. But the fact that he was Barbara's friend and that they spent their spare time together, should be useful in the further steps of the experiment — so it seemed to Dr. Gloge.

Sliding his hand under his coat where the jet gun rested, he moved quickly out into the passage and across it toward Vince Strather . . .

Even as he pressed the trigger, he knew his nervousness had betrayed him.

The needle tip of the gun had been too far away from Strather; a foot; almost two feet too far. At that greater distance the jet stream, emerging from the needle at nearly a thousand miles an hour, had time to spread and slow down. It caught Strather high up on the shoulder blade and tugged at his skin as it entered. For Strather, the sensation must have been that of a sharp impact. He jumped and cried out, then stood shuddering, as if in shock — long enough for Gloge to slip the little gun back into its holster and close up his coat.

But that was all. Vince Strather whirled. His hands caught Gloge by the arms, and his angry face glared down into the Doctor's.

"You damn jerk!" he shouted. "What did you hit me with just now?"

Who the hell are you, anyway?"

For a moment, Dr. Gloge felt appalled. Then he tried to twist out of Strather's hard grip. "I don't know what you're talking about!" he said breathlessly.

He stopped. He saw that Vince was gazing past his shoulder. The young man's grip relaxed suddenly, and Gloge was able to free himself. He turned and looked behind him. He felt a stunned, incredulous dismay.

John Hammond was coming along the passage, gray eyes fastened questioningly upon them. Gloge could only hope desperately that he had not been in sight when the gun was being fired.

Hammond came up and said in a tone of easy authority: "Dr. Gloge, what's going on here?"

"Doctor!" Vince Strather repeated, in a startled voice.

Gloge put puzzled indignation in his tone: "This young man appears to be under the impression that I struck him just now. Needless to say, I did nothing of the kind and don't understand what gave him such an idea."

He looked frowningly back at Strather. Strather's gaze shifted uncertainly between them. He was obviously abashed by John Hammond's presence and Gloge's title but not yet over his anger.

He said sullenly, "Well, something hit me. At least it felt that way! When I looked around, he was standing there. So I thought he'd done it."

"I was passing you," Dr. Gloge

corrected him. "You exclaimed something and I stopped." He shrugged, smiled. "And that's all I did, young man! I certainly had no reason to strike you."

Strather said grudgingly, "I guess I was mistaken."

Dr. Gloge said promptly, "Then let's call it an error and forget it!" He held out his hand.

Strather reached out reluctantly and shook it, then looked at Hammond. When Hammond remained silent, he turned away in obvious relief, took one of the boxes from the truck and disappeared into the storeroom with it.

Hammond said, "I was on my way to your office, Doctor, where I expect to have an interview with you in a few minutes on the Omega project. I presume you were heading in that direction."

"Yes, yes." Gloge fell into step beside the bigger man. He was thinking: "Did he see anything?"

His companion gave no sign.

A few minutes later, as he gazed across the gleaming desk of his private office at John Hammond, Gloge had the uneasy feeling of a criminal confronted by the law. It had always amazed him that this man — Hammond — could make him feel at very least like a small boy.

Yet the discussion that now developed began with a reassuring statement from the bigger man:

"This is a completely informal conversation, Doctor. I am not representing President Sloan at the moment — even less the Board of

Regents. That has been deliberately arranged. It will make it possible for both of us to speak quite frankly."

Dr. Gloge said, "Have there been complaints about my work here?"

Hammond nodded. "You can't have remained entirely unaware of it, Doctor. You've been asked to amplify your project reports, make them more detailed and specific, three times within the last two months alone."

Gloge was reluctantly deciding that he would have to tell some of his data.

He said with apparent openness, "My reluctance to communicate has been due to a strictly scientific dilemma. Things were happening in the experiment but their meaning was not clear to me until very recently."

"There is a feeling," said Hammond in his steady voice, "that your project is failing."

Dr. Gloge said sharply, "The accusation is unworthy!"

Hammond looked at him, said, "No accusations have been made — as yet. That's why I'm here today. You have reported no successes within the past six months, you know."

"Mr. Hammond, there have been many failures. Within the limited framework of the present stages of the project experiments, that is exactly what should be expected."

"Limited in what way?"

"Limited to the lower, less complicated forms of animal life."

"That," said Hammond mildly, "is a limitation you yourself have imposed on the project."

Dr. Gloge agreed. "True. The conclusions I've been able to form at such lower levels have been invaluable. And the fact that the results of the experiments have been almost invariably negative, in the sense that as a usual result the subject animals evolved into non-viable forms, is completely unimportant."

"As a usual result," Hammond repeated. "Then not all of them died quickly?"

Gloge bit his lip. That was not an admission he had intended to make at this initial stage in the discussion.

He said, reluctantly, "In a respectable percentage of the cases, the subject animals survived the first injection."

"And the second?"

Gloge hesitated. But there was no turning back. "The survival percentage drops very sharply at that point," he said. "I don't recall the exact figures."

"And the third?"

He was really being forced to make revelations. Dr. Gloge said, "To date, three animals have survived the third injection. All three were of the same species — *Cryptobranchus*."

"The hellbender," said Hammond. "Well! A large salamander . . . Now, the third injection, according to your theory, should advance an animal along the evolutionary line stimulated in it to a point which might be reached through half a million years of natural evolution. Would you say such a result was achieved in these three cases?"

Dr. Gloge said, "Since *Cryptobranchus* might be considered with some reason to be a species in which evolutionary development is at a practical standstill, I should say that much more was achieved."

"What were the observable changes?"

Gloge had been bracing himself as he made one admission after another. He was striving to decide exactly when he could start resisting the interrogation.

Now! he thought.

He said aloud, trying to appear frank, "Mr. Hammond, I'm beginning to realize that I was in error in not making more positive reports. I can't believe that you are really interested in these superficial accounts. Why not let me summarize my observations for you?"

Hammond's gray eyes were clam and steady. "Go ahead," he said in an even tone.

Gloge outlined his conclusions, then. The interesting features were two-fold, probably equally important.

One of these was that there remained in all life forms a wide evolutionary choice. For reasons that were not yet clear, the Omega serum stimulated one of these potential developments and no subsequent stimulation could alter the mutational direction. Most of these developments led to extinction.

"The second feature," said Gloge, "is that the chances for success increase as the life form becomes more highly evolved."

Hammond said, interested, "What you're saying is that when you finally

start working with the more active mammals and eventually monkeys, you expect more and better results?"

"I have no doubt about it," said Dr. Gloge, firmly.

A secondary aspect — Gloge continued — was that brain areas which controlled the inhibition of simple reflexes often seemed to be the source of new neural growth and of sensory extension. The serum apparently intensified these effort points, increasing their operational flexibility. What went wrong was that all too often such one-sided inhibitory amplification ended in non-survival.

However, in *Cryptobranchus*, the roof of the mouth developed small functional gills. The hide thickened into segmented, horny armor. Short, grooved fangs were acquired and connected to glands that produced a mild hematotoxic venom. The eyes disappeared, but areas in the skin developed sight-level sensitivity to light.

Gloge shrugged, finished: "There were other changes, but these would seem the most dramatic ones."

"They sound sufficiently dramatic," said Hammond. "What happened to the two specimens which were not dissected?"

Dr. Gloge realized that his diversion had not worked. "They were given the fourth injection, of course," he said resignedly.

"The one," Hammond asked, "which was to advance them to a point a million years along the evolutionary line they were following —"

"Or," Dr. Gloge said, "to the peak-point of that evolutionary line. The equating of the four stages of the stimulation process to the passing of specific periods of normal evolutionary development—twenty thousand years, fifty thousand, five hundred thousand, and one million years — is, of course, hypothetical and generalized. My calculations indicate that in many species of which we have knowledge in that area the two points might be approximately the same."

Hammond nodded. "I understand, Doctor. And what happened after your evolved *Cryptobranchus* received the fourth injection?"

"I cannot give you a precise answer to that, Mr. Hammond. In appearance it was a very rapid breakdown of the entire structure. Within two hours, both specimens literally dissolved," Gloge answered tensely.

"In other words," Hammond said, "Point Omega Stimulation directs *Cryptobranchus* and, in fact, every species to which it has been applied into one of the many blind alleys of evolution."

Dr. Gloge said curtly, "So far it has done that."

Hammond was silent, then: "One more point," he said. "It's been suggested that you might consider taking on a sufficiently qualified assistant in this work. Research Alpha probably could obtain Sir Hubert Roland for a project of such interest."

Dr. Gloge said coldly, "With all due respect for Sir Hubert Roland's accomplishments, I would regard

him as a meddler here! If the attempt is made to force him on me, I shall resist it."

"Well," Hammond said easily, "let's not make any unalterable decisions at the moment. As I mentioned, this has been a completely informal discussion." He glanced at his watch. "I'm afraid we'll have to terminate it now. Would you have time to see me in my office one week from today at ten o'clock, Doctor? I wish to carry this matter a little further, and that will be my first free time."

Dr. Gloge had difficulty restraining his feeling of triumph. Today was Wednesday. He had selected it as his starting time because he had wanted his subjects to be away from their place of work over the weekend.

Between now and Saturday, he could undoubtedly accomplish the first two injections on the young couple.

By the following Wednesday, the third, perhaps even the fourth shot would have been administered and all strong reactions either taken care of or the experiment terminated.

To cover up his elation, Gloge said in the tone of one making a concession, "As you wish, Mr. Hammond."

III

Dr. Henry Gloge was awake much of the night, vacillating between hopes and fears of what he would find when he went to check on the first results of Point

Omega Stimulation in human beings. If they were obviously negative, he would have only one choice.

It could be called murder.

Dr. Gloge approached that subject in a detached, undisturbed frame of mind. He had several times in his work secretly carried on a more advanced experiment while, ostensibly, following the step-by-step scientific method. Thus fortified by special knowledge, he had in the past been able to plan lower-step work with the sometimes intuitive insights gained from his unpublicized private investigation.

The importance of the Omega project to him justified a similar expedient. Objectively considered, in the light of such a goal, the lives of the two young people he had chosen for the experiment were of no value. Their destruction, if it became necessary, would be in the same category as the slaughter of other experimental subjects.

With human beings there was, of course, an element of personal risk involved for himself. It was that realization that troubled him, now that he had made the first injection. Time and again, Dr. Gloge awakened out of a nightmare-riddled half-sleep, to quail anew at the knowledge and to lie sweating with anxiety until he slid back into exhausted slumber.

When four o'clock came, it was almost with relief that he arose, fortified himself with several tablets of a powerful stimulant, made a last check of his preparations, and set out across town toward the house where the Ellington girl had a room.

He drove in a black panel truck that he had bought and equipped for his experiment.

He arrived at his destination about a quarter past five. It was a quiet residential street, a tree-lined avenue in one of the older sections of the city, approximately eight miles west of the Research Alpha complex. Two hundred yards from the house, Dr. Gloge pulled the small truck up to the curb on the opposite side of the street and shut off the motor.

For the past week, a miniature audio pickup-recorder, inserted under the bark of a sycamore tree across the street from the house, had been trained on Barbara Ellington's second-floor room, its protruding head cunningly painted to resemble a rusty nail. Dr. Gloge now took the other part of the two-piece instrument from the dashboard compartment of the truck, inserted the plug in his ear, and switched it on.

After perhaps half a minute of twisting the tuning dial back and forth, he felt his face whiten. He had tested the instrument at night on two occasions during the past week. It was quite sensitive enough to pick up the sounds of breathing and even the heartbeat of anyone in the room; and so he knew with absolute certainty that Barbara Ellington's room had no living occupant at this moment.

Quickly, he attached the recording playback mechanism to the little device, turned it back one hour, and put the plug into his ear again.

Almost at once, he relaxed.

Barbara Ellington had been in that room, asleep, an hour ago breath even and undisturbed, heartbeat strong and slow. Dr. Gloge had listened to similar recordings of too many experimental animals to have the slightest doubt. *This* subject had moved up successfully, unharmed, to the first stage of Point Omega Stimulation!

The impact of his triumph after the ghastly fears of the night was very strong. Dr. Gloge needed several minutes to compose himself. Finally, he was able to move the recorder by ten-minute steps to a point where the Ellington girl obviously was awake and moving about the room. He listened with absorbed fascination, feeling almost able to visualize from moment to moment exactly what she was doing. At one point, she stood still for some seconds and then uttered a low, warm laugh which sent thrills of delight through the listening scientist. Perhaps a minute later, he heard a door being closed. After that, there was only the empty, lifeless silence which had startled him so badly.

Barbara Ellington had awakened that Thursday morning with a thought she had never had before. It was: "Life doesn't have to be serious!"

She was contemplating this frivolous notion with the beginning of amazement when a second thought came which she had also never had in her entire previous existence. "What is this mad drive to enslave myself to a man?"

The thought seemed natural and obviously true. It had no general rejection of men in it. She still — it seemed to her — loved Vince . . . but differently.

Thought of Vince brought a smile. She had already noted in one of numerous, quick, darting glances around the room that it was nearly two hours before her usual rising time. The sun was peering through her bedroom window at that almost horizontal angle which, in the past, had seemed to her a horrifying threat that she would be robbed of precious sleep.

Now, it struck her: "Why don't I call Vince and we'll go for a drive before I have to go to work?"

She reached for the phone, then considered and drew back. Let the poor man sleep a little longer.

She dressed swiftly, but with more than usual care. When she glanced at the mirror, it occurred to her that she was better looking than she had realized.

. . . Very much better looking! she decided an instant later. Intrigued, for a moment amazed, she went up to the mirror, studied the face in it. Her face, familiar. But also the face of a radiant stranger. Another awareness came and the bright, glowing, blue mirror-eyes holding hers seemed to widen.

"I feel twice as alive as I ever have before!"

. Surprise . . . pleasure . . . and suddenly: "Shouldn't I wonder *why*?"

The mirror-face frowned slightly, then laughed at her.

There had been a change, a wonderful one, and the change was not

yet complete. There was a sense of shifting deep inside her, of flows of brightness along the edges of her mind. Curiosity had stirred, but it was light, not urgent or anxious. "When I want to know, I *will* know!" Barbara told herself . . . and, with that, the trace of curiosity was dismissed.

"And now."

She glanced once more around the little room. For over a year, it had held her, contained her, sheltered her. But she didn't want shelter now. The room couldn't hold her today!

She decided, smiling, "I'll go and wake up Vince."

She rang Vince's doorbell five times before she heard him stirring inside. Then his voice called harshly, thickly, "*Who* is that?"

Barbara laughed. "It's me!"

"Good God!"

The lock clicked back and the door opened. Vince stood staring at her with bloodshot eyes. He'd pulled a robe on over his pajamas; his bony face was flushed and his red hair tangled.

"What are you doing up at this hour?" he demanded as Barbara stepped past him into the apartment. "It's half-past five!"

"It's a wonderful morning. I couldn't stay in bed. I thought I'd get you to go for a drive with me before I went to work."

Vince pulled the door shut, blinked at her incredulously. "Go for a drive!" he repeated.

Barbara asked, "Aren't you feeling well, Vince? You look almost as if you're running a fever."

Vince shook his head. "I don't feel feverish, but I sure don't feel well either. I don't know what's the matter. Come on and sit down. Want some coffee?"

"Not especially. I'll make some for you, if you like."

"Nah, don't bother. I'm sort of nauseated right now." Vince sat down on the couch of the little living room, fished cigarettes and matches from a pocket of his robe, lit a cigarette and grimaced. "That doesn't taste too good either!" He scowled at Barbara. "Something pretty damn funny happened yesterday! And I'm not sure —"

He hesitated.

"Not sure of what, Vince?"

"That that isn't why I'm feeling this way." Vince paused again, shook his head, muttered, "Sounds crazy, I guess. You know that Dr. Gloge you worked for once?"

It seemed to Barbara as if whole sections of her mind lit up in brilliance at that instant. She heard Vince start to tell his story. But — except for John Hammond's intervention — it was something she already knew.

Part of a much bigger story . . .

She thought: Why, that impudent little man! What a wild, wonderful, terrific thing to do!

Excitement raced through her. The paper she had seen lying on Helen Wendell's desk flashed into her mind, every word sharp and distinct — and not only the words!

Now she understood. What they meant, what they implied, the possibilities concealed behind them — for herself, for Vince.

Another feeling awoke. Sharp wariness.

There was danger somewhere here! John Hammond . . . Helen . . . the hundreds of little impressions she'd received all suddenly flowed together into a picture clear but puzzling — of something supra-normal, she decided, amazed.

Who were they? What were they doing? In a dozen different ways, they didn't really fit in an organization like Research Alpha. But they had virtually complete control.

Not that it mattered immediately. Yet she was certain of one thing. They were opposed to what Dr. Gloge was attempting through Point Omega Stimulation, would stop it if they could.

"But they can't!" she told herself. What Dr. Gloge had begun was right. She could feel the rightness of it like a song of triumph in every aspect of her being. She would have to make sure that it wasn't stopped at this point.

But she would need to be careful — and act quickly! It was incredibly bad luck that John Hammond had arrived almost while Dr. Gloge was giving Vince his first shot.

"Do you think I should report it?" Vince asked.

"You'd look a little foolish if it turned out that you were coming down with the flu, wouldn't you?" Barbara said lightly.

"Yeah." He sounded hesitant.

"What does it feel like, aside from the nausea?"

Vince described his symptoms. Not unlike her own — and she'd had a few bad moments before she went

to sleep last night. Vince was going through an initial reaction period more prolonged and somewhat more severe than hers.

She was aware of a fond impulse to reassure him. But she decided it would be unwise to tell him what she knew. Until he came out of his physical distress, such information might disturb him dangerously.

She said urgently, "Look, you don't have to go to work until tonight. So the best thing for you is to get a few more hours of sleep. If you start feeling worse, and would like me to take you to a doctor, give me a call and I'll come and get you. Otherwise, I'll phone at ten."

Vince agreed immediately. "I'm really awfully groggy. That's a big part of it. I'll just stretch out on the couch instead of going back to bed."

When Barbara left a few minutes later, her thoughts quickly turned away from Vince. She began to consider various methods she might use to approach Dr. Gloge this very day.

Gloge reached the street where Vincent Strather lived and was looking for a parking place, when suddenly he saw Barbara Ellington emerge from the area of the apartment building and start across the street ahead of him.

The girl was perhaps a hundred yards away. Dr. Gloge braked the panel truck hastily, pulled it in to the curb, rolled up behind another car parked there and stopped. He sat there, breathing hard at the narrow margin by which he had avoided being seen.

Barbara had hesitated, glancing in the direction of the approaching truck, but now she was continuing across the street. Watching her swift, lithe stride, the proudly erect carriage of her body — comparing that picture with the frozen awkwardness he had observed in all her movements the day before — Dr. Gloge felt his last doubts resolve.

It was in the human species that Point Omega Stimulation would achieve its purpose.

His only regret now was that he had not arrived even as much as ten minutes earlier. The girl obviously had come to see Strather, had been with him until now. If he had found them together examination on a comparison basis could have been made of them simultaneously.

The thought did not in the least diminish the tingling excitement that filled him as he watched Barbara's brown car pull out into the street and move away. He waited until her car was out of sight, then drove the truck down to the alley beside the apartment building and turned in to it. His intention was to give Strather a careful physical examination.

A few minutes later, Dr. Gloge watched a pointer in the small instrument he was holding drop to the zero mark on the dial. Pulling off the respirator clamped over his mouth and nose, he stood looking down at the body of Vincent Strather sprawled on the living room couch.

Vincent Strather's appearance was much less satisfactory than he had expected. Of course, the young man's reddened face and bloodshot eyes might be due to the paralyzing gas

Dr. Gloge had released into the apartment as he edged open the back door. But there were other signs of disturbance; tension, distended blood vessels, skin discoloration. By comparison with Barbara Ellington's vigor and high spirits, Strather looked drab and unimpressive.

Nevertheless, he had survived the first shot.

Gloge straightened, studied the motionless figure again, then went about the apartment quietly closing the window he had opened exactly one minute after releasing the instantly effective gas. The gas had dissipated now. When its effect on Strather wore off an hour or so from now, there would be nothing to tell the subject that anything had occurred here after Barbara Ellington had left.

Tomorrow he would return and give Strather the second shot.

As he locked the back door behind him and walked over to the panel truck, Dr. Gloge decided that he would have to come back and check both his subjects that night.

He felt extremely confident. It seemed to him that before anyone found out that it had been started, the Point Omega Stimulation experiment on human beings would have run its course.

IV

Hammond heard the bell sound as he was shaving in the bathroom of his living quarters which were located behind his office. He paused, then deliberately put down



his razor and activated a hidden microphone in the wall.

"Yes, John?" Helen's voice came.

"Who came in?"

"Why—only Barbara." She sounded surprised. "What makes you ask?"

"The life range indicator just now registered an over-six read."

"On *Barbara!*" Helen sounded incredulous.

"On somebody," said Hammond.

"Better have **Special Servicing** check the indicator **out**. Nobody else came in?"

"No."

"Well—**check it.**" He broke the connection and finished shaving.

The buzzer sounded in Barbara's office a little later—the signal that she was to report with her notebook to Hammond's office. She went, curious, wondering if he would notice any change in her. Much more important was her own desire to take a closer look at this strange, powerful man who was her boss.

She walked into Hammond's office and was about to sit in the chair he motioned her to, when something in his manner warned her. Barbara made an apologetic gesture.

"Oh, Mr. Hammond—excuse me a moment."

She hurried out of the office and down the hall to the washroom. The moment she was inside, she closed her eyes and mentally re-lived her exact feelings at the instant she had sensed—whatever it was.

Not Hammond at all, she realized. It was the chair that had given forth some kind of energy flow. Eyes still closed, she strove to perceive what within herself had been

affected. There seemed to be an exact spot in her brain that responded each time she reviewed the moment she had started to sit down.

She couldn't decide what the response was. But she thought: "I don't have to let it be affected now that I know."

Relieved, she returned to Hammond's office, seated herself in the chair and smiled at Hammond where he sat behind his great, gleaming, mahogany desk.

"I'm sorry," she said. "But I'm ready now."

During the half hour that followed, she took shorthand with a tiny portion of her mind, and with the rest fought off a steady, progressively more aware battle against the energy pressure that flowed up at her in rhythmic waves from the chair.

She had by now decided it was a nerve center that reacted to hypnotic suggestion, and so when Hammond said suddenly, "Close your eyes, Barbara!" she complied at once.

"Raise your right hand!" he commanded.

Up came her right hand, with the pen in it.

He told her to place it back in her lap; and then swiftly put her through several tests—which she recognized as being of a more important kind.

What interested her even more was that she could let the center respond and monitor the parts of the body that he named—without losing control. So that when he

commanded her hand to be numb and suddenly reached over and stuck a needle into it, she felt no sensation; and so she did not react.

Hammond seemed satisfied. After normalizing the feeling in her hand, he commanded: "In just a moment, I'm going to tell you to forget the tests we've just been doing, but you will remain completely under my control and answer truthfully any questions I ask you. Understand?"

"Yes, Mr. Hammond."

"Very well, forget everything we've done and said since I first asked you to close your eyes. When the memory has completely faded, open your eyes."

Barbara waited about ten seconds. She was thinking: "What roused his suspicions so quickly? And why would he care?" She suppressed an excited conviction that she was about to discover something of the secret life that went on in this office. She had never heard of a hypnotizing chair.

She opened her eyes.

She swayed — an act — then caught herself. "I beg your pardon, Mr. Hammond."

Hammond's gray eyes regarded her with deceptive friendliness. "You seem to be having problems this morning, Barbara."

"I really feel very well," Barbara protested.

"If there's anything in your life that has changed recently," he said quietly, "I want you to confide in me."

That was the beginning of an intensive questioning into her past history. Barbara answered freely.

Apparently Hammond was finally convinced, for he presently politely thanked her for the conversation and sent her off to type the letters he had dictated.

As she sat at her desk a few minutes later, Barbara glanced up through the glass and saw Helen Wendell walking along the hall toward Hammond's office, disappear into it.

Hammond greeted Helen: "All the time I talked to Barbara, the life range indicator showed eight-four, above the hypnotizable range. And she told me nothing."

"How is it registering on me?" Helen asked.

He glanced down at his right to the instrument in an open desk drawer.

"Your usual eleven-three."

"And you?"

"My twelve point seven."

"Perhaps only the middle ranges are out of order," Helen said, and added, "Special Servicing will make their check after day-time office hours. All right?"

Hammond hesitated, then agreed that there seemed to be no reason for breaking the rules of caution by which they operated.

During the lunch hour, Barbara experienced a brief return of the dizziness. But she was alert now to the possibilities. Instead of simply letting it happen, she tried to be aware of every nuance of the feeling.

There was a — shifting — taking place inside her.

She sensed a flow of energy par-

ticles from various points in her body to other points. A specific spot in her brain seemed to be monitoring the flow.

When the pulsations ceased — as abruptly as they had started — she thought: "That was more change taking place. I grew in some way in that minute."

She sat very still there in the restaurant, striving to evaluate what had changed. But she couldn't decide.

Nonetheless, she was content. Her impulse had been to seek out Dr. Gloge some time during the day in the hope that he would be wanting to give her a second injection. That ended. Obviously, all the changes from the first shot had not yet taken place.

She returned to *Scientific Investigation and Liaison*.

The bell sound, as Barbara entered, caused Hammond to glance at the indicator. He stared at it for a long moment, then buzzed Helen Wendell.

"Barbara now reads nine point two!" he said softly.

Helen came to the door of his office. "You mean her reading has gone up?" She smiled. "Well, that settles it. It is the instrument."

"What makes you say that?" Hammond seemed strangely unsure.

"In all my experience," Helen said, "I've never seen anyone change for the better. There's the slow drop as they grow older, but —" she stopped.

The strong face was relaxing. Yet after a moment Hammond said, "Still — we never take chances, so

I think I'll keep her with me tonight. Do you mind?"

"It's a nuisance," she said, "but all right."

"I'll give her the conditioning that overwhelms twelve point 0 and higher. She'll never know what hit her."

V

It was shortly after dark when Dr. Henry Gloge parked his black van near Barbara's home. He promptly tuned in on the audio device attached to the tree and adjusted the volume for pickup.

After thirty seconds of silence, he began to frown. "Not again!" he thought; then, wearily, "Well, maybe she's over at her boy friend's."

He started the motor and presently drew up at the curb opposite Strather's apartment. A quick check established that the lanky redhead was there — but alone.

The young man was awake and in an angry state. As Gloge listened in, Vince savagely picked up the phone and dialed what must have been Barbara's number, for presently he slammed the receiver down and muttered, "Doesn't she know I've got to go to work tonight? Where can that girl be?"

That, in rising alarm, was a question which Gloge asked himself as the evening wore on. He returned to the vicinity of Barbara's boarding house. Until eleven P.M. the phone in her room rang periodically, testifying to Vince's concern.

When it had not rung for an hour, Gloge presumed that Strather

had gone off to night duty. It was not a fact that could be left to surmise. He drove back to Vince's apartment. No sounds came from it.

Gloge accordingly returned to the street where Barbara lived.

He was tired now, so he rigged up an alarm system that would buzz him if Barbara entered her room; then, wearily, he crawled onto the cot in the back of the van and quickly fell into a deep sleep.

Earlier, as Barbara sat in her office a few minutes before closing time, she swayed and almost blacked out.

Greatly alarmed, she emerged from her office and reported the feeling to Helen Wendell. She did not question the logic of seeking the help of Hammond's blonde aide.

The secretary was sympathetic, and promptly took her in to John Hammond. By this time Barbara had experienced several more brief blackouts. So she was grateful when Hammond unlocked the door behind his desk, led her through a luxurious living room and into what he called the "spare bedroom."

She undressed, slipped under the sheets and promptly went to sleep. Thus, subtly, she was captured.

During the evening, Hammond and Helen Wendell took turns looking in on her.

At midnight, the Special Servicing expert reported that the life range indicator was working properly and he himself checked the body of the sleeping girl. "I get nine two," he said. "Who is she? New arrival?"

The silence that greeted his remark abruptly startled him. "You mean she's an Earther?"

"At least," said Helen Wendell after the man had departed, "there's been no further change."

Hammond said, "Too bad she's above the hypnotizable stage. Mere conditioning is actually a sorry substitute for what we need here—truth."

"What are you going to do?"

Hammond did not make up his mind about that until after day-break.

"Since nine two is no real threat to us," he said then, "we merely return to routine and keep aware that maybe somebody is doing something that we don't know about. Perhaps we might even use a little ESP on her occasionally."

"Here — at Alpha?"

Hammond stared thoughtfully at his beautiful aide. Normally, he trusted her reactions in such matters.

She must have sensed what he was thinking, for she said quickly, "The last time we used extended perception, about 1800 Earthers tuned in on us. Of course, they thought of it merely as their imagination, but some of them compared notes. It was talked about for weeks, and some awfully important things were close to being revealed."

"We-l-l-l, okay, let's be aware of her then."

"All right. On that basis I'll wake her up."

As soon as she was in her office, Barbara phoned Vince. There was no answer. Which was not sur-

prising. If he had worked the night shift, he would be dead to the world. She hung up and checked with the photo lab, and was much relieved when the night work list showed that Vince had signed in and out.

As she sat at her desk that morning, Barbara felt extremely grateful to Hammond and his secretary for having been so helpful to her. But she was also slightly guilty. She suspected that she had been affected again by the injection that Gloge had given her.

It was disconcerting to have been so strongly affected. "But I feel all right now!" she thought as she typed away at the pile of work Helen Wendell had put in her basket. Yet her mind was astir with plans. At ten o'clock, Helen sent her out with the usual morning briefcase full of memos and reports.

Elsewhere —

Gloge had awakened shortly after seven. Still no Barbara. Baffled, he shaved with his electric razor, drove to a nearby business thoroughfare and ate breakfast.

He next went back to the street where Strather lived. A quick check established that the man was home. Gloge triggered his second charge of gas — and a few minutes later was in the apartment.

The young man had changed again to his pajamas, and he lay stretched out once more on the settee in his living room. If anything, the angry expression on his face was more pronounced.

Gloge, needle in hand, hesitated. He was not happy with this subject. Yet he realized that there was no

turning back at this stage. Without further pause holding the point almost against Strather's body, he squeezed the trigger.

There was no visible reaction.

As he headed for his office at Research Alpha, Gloge's thought was on the girl. Her absence was unfortunate. He had hoped to inject the serum into his two subjects at approximately the same time. Evidently that was not going to happen.

VI

A few minutes after he returned to his office, Dr. Gloge's phone rang. His door was open, and he heard his secretary answer. The woman looked up over the receiver.

"It's for you, Doctor. That girl who worked here for a while — Barbara Ellington."

The shock that went through Gloge must have shown as disapproval, for the woman said hastily, "Shall I tell her you're not in?"

Gloge quivered with uncertainty. "No." He paused; then, "I'll take the call in here."

When he heard the clear, bell-like voice of the girl, Dr. Gloge felt tensely ready for anything.

"What is it, Barbara?" he asked.

"I'm supposed to bring some papers over to you," her voice trilled in its alive, vital way. "I'm to give them to you only, so I wanted to make sure you would be there."

. . . Opportunity!

It seemed to Gloge that he couldn't have asked for a more favorable turn. His other subject would now come to his office where

he could fire the second injection into her and deal personally with any reaction.

As it developed, there was no reaction that he could detect. She had turned away after delivering the papers to him, and that was when he fired the needle gun. It was a perfect shot. The girl neither jumped nor swung about; she simply kept going toward the door, opened it, and went through.

Barbara did not return to Hammond's office. She expected a strong physiological disturbance from the second injection, and she wanted to be in the privacy of her own room when it happened. It had cost her an effort not to react in front of Gloge.

So she stayed in her bedroom, waited as long as she thought wise, and then phoned and told Helen Wendell that she was not well.

Helen said sympathetically, "Well, I suppose it was to be expected after the bad night you had."

Barbara answered quickly, "I began to have dizzy spells and nausea. I panicked and rushed home."

"You're home now?"

"Yes."

"I'll tell Mr. Hammond."

Barbara hung up, unhappy with those final words. But there was no way to stop his learning about her condition. She had a feeling she was in danger of losing her job. And it was too soon. Later, after the experiment, it wouldn't matter, she thought uneasily.

Perhaps she had better take the "normal" precautions of an employee. "After all," she thought, "I prob-

ably show symptoms." She called her doctor and made an appointment for the following day. Barbara replaced the receiver feeling a strange glee. "I ought to be in foul shape by tomorrow," she thought, "from the second injection."

What Hammond did when he returned to his office late that afternoon was to sit in thought for a while after Helen reported to him Barbara's situation.

Then:

"It doesn't add up. Helen. I should have asked you before. Have you examined her file?"

The blonde young woman smiled gravely. "I can tell you everything that's in it, right from the top of my head. After all, I security-checked her. What do you want to know?"

"You mean there's nothing?"

"Nothing that I could find."

Hammond hesitated no longer. He was accustomed to trusting Helen Wendell. Abruptly he threw up his hands. "All right. She's got the whole weekend to be sick in. Call me when she comes in to work again. Did that report arrive from New Brasilia?"

"It was sent to Manila Center."

"Are you serious? Let me talk to Ramon. There must be a reason!" Quickly he was absorbed in his new tasks.

Barbara slept. When she awakened her clock said twelve after seven.

It was daylight, early morning. She found that out in a sensational fashion. She went outside and

looked . . . without moving from the bed!

There she was lying in her bedroom; and there she was out in the street.

Simultaneously.

Involuntarily, she held her breath. Slowly, the outside scene faded, and she was back in the bed, wholly indoors.

With a gasp, she started breathing again.

By cautious experimentation, she discovered that her perception extended about a hundred yards.

And that was all she learned. Something in her brain acted like an invisible eye stalk that could reach through walls and bring back visual images to the light-interpretation centers. The ability remained completely stable.

Presently she became aware that a small black van was parked down the street and that Dr. Gloge was in it. She realized that he had an instrument with an earplug with which he seemed to be listening in on her.

His face was intent, his small eyes narrowed. Something of the determination of this little, bald-headed scientist seeped through to her, and Barbara suddenly felt uneasy. She sensed remorselessness, an impersonal quality that was entirely different from her own light-hearted participation in his experiment.

To Gloge — she realized suddenly — his subjects were like inanimate objects.

In human terms the viciousness of it was infinite.

As she continued to perceive him,

Gloge shut off his instruments, started the motor of his car and drove off.

Since Vince was again on the night shift, presumably Gloge was heading home.

She phoned Vince's apartment to make sure; when there was no answer, she called the photo lab.

"No, Strather didn't come in last night," the administrative assistant of that department told her.

Barbara replaced the receiver unhappily, recalling that Vince had not responded well to the first shot. She suspected the biologist had given him his second shot also, and that he was not responding favorably to it either.

She dressed and drove over to his apartment. As she came near, she could see him inside, so when he showed no sign of replying to her ring, she let herself in with her key—and found him on the living room couch, tossing and turning. He looked feverish. She felt his forehead; it was dry and hot to the touch.

He stirred and opened his eyes, looked up with his sick brown eyes into her bright blue ones. She thought unhappily: "I'm so well and he's so ill. What can be wrong?"

Aloud, anxiously, she said, "You need a doctor, Vince. What's the name of that man who gave you a checkup last year?"

"I'll be all right," he mumbled. He sank back to sleep.

Sitting there on the settee beside him, Barbara felt something in her lungs. Her instant, amazed thought was: "Gas!" But she was too slow.

She must have blacked out instantly — because her next awareness was of lying on the floor, and of Gloge bending over her.

The scientist was calm, efficient, seemed satisfied. Barbara caught his thought; "She'll be all right."

She realized that he was stepping past her to Vince. "Hmmm!" Gloge seemed critical and unhappy. "Still not good. Let's see if tranquilizer will help him."

He made the injection, then straightened, and there was a strange, hard thought in his mind: "By Monday night, it'll be time for the third injection and I'll have to decide what to do."

So clear was the thought that came from him, it was almost as if he spoke aloud. What his thought said was that he intended to kill them both, if either failed to develop as he desired.

Shocked, Barbara held herself very still; and at that moment an entirely different growth process occurred in her.

It began with a veritable flood of suppressed information suddenly rising to the surface of her mind.

...About the reality of what people were like... the dupes, the malingerers and the weaklings on the one hand, and, on the other, the angry and the distorted, the worldly wise and the cynics. She recognized that there were well-meaning people in the world who were strong, but she was more aware of the destructive at this instant... by the million, the swindlers and betrayers — all self-justified, she saw now. But she realized also that they had mis-

read their own bitter experiences. Because they were greedy and lustful and had lost their fear of punishment, earthly or unearthly; because they resented being thwarted in their slightest whim; because—

A forgotten scene flashed into her mind from her own past, of a minor executive in her first job, who had fired her when she refused to come up to his apartment.

All her life, she had been taught and she had tried not to be aware of such things. But now, at some level of neural computation, she permitted all *that* data to be calculated into the main stream of her awareness.

The process was still going on a few minutes later when Gloge departed as silently as he had come.

After he had left, Barbara tried to get up and was surprised that she could not even open her eyes. The realization that her body was still unconscious presently enthralled her.

What a marvelous ability!

As time passed, it began to be disconcerting. She thought: "I'm really quite helpless." It was early afternoon before she was finally able to move. She got up, subdued and thoughtful, warmed a can of soup for Vince and herself and forced him to drink it from a cup.

Immediately after, he stretched out again on the couch and fell asleep. Barbara left the apartment to keep her appointment with her own doctor.

As she drove, she could feel a stirring inside her. More change? She decided it was. Perhaps there would be many such between now



and Monday. Yet her intuition was that she would not be able to dominate this situation with the changes from the first and second shots only.

"Somehow," she thought, "I've got to get that third shot."

VII

At noon Monday, after he had dictated some letters to a girl from the steno pool, Hammond came out of his office.

"What's the word from Nine-two?"

Helen looked up with her flashing smile. "Barbara?"

"Yes."

"Her doctor called in this morning at her request. He said he saw her Saturday. She appears to have a mild temperature, is subject to dizzy spells, and a variety of unmentionable ailments like diarrhea. However, there's one unexpected thing, the doctor said — evidently his own comment. Interested?"

"Of course."

"He said that in his opinion Barbara has had a major personality change since he last checked her about a year ago."

Hammond shook his head slowly. "Merely confirms our own observation. Well, keep me in touch."

But about four o'clock, when the long distance screen was finally silent, he buzzed Helen Wendell. "I can't get that girl out of my mind. It's premonition level stuff, so I can't ignore it. Phone Barbara."

She called to him a minute later: "Sorry, there's no answer."

"Bring her file to me," said Ham-

mond. "I've got to assure myself I'm not missing something in this unusual matter."

As he scanned the typed pages a few minutes later, he came presently to the photograph of Vince Strather. He uttered an exclamation.

"What is it?" Helen asked.

He told her what had happened the previous week between Dr. Gloge and Vince Strather.

He finished, "Of course, I didn't connect Barbara with that young man. But this is his picture. Get Gloge's file."

"Apparently the change started when his sister died two months ago," Helen Wendell said presently. "One of those sudden and dangerous shifts in personal motivation." She added ruefully, "I should have watched him on that. The death of a near relative has often proved important."

She was seated in the main room of Hammond's living quarters at Research Alpha. The door to Hammond's private office behind them was closed. Across the room, a large wall safe had been opened, revealing a wide double row of thin, metal-bound files. Two of the files — Henry Gloge's and Barbara Ellington's — lay on the table before Helen. Hammond stood beside her.

He said now, "What about that trip he made back east early in the month?"

"He spent three days in his home town, purportedly to make arrangements to sell his sister's and his property there. They had a house, complete with private laboratory,

untenanted, on the grounds of an old farm. The perfect location for unsupervised experimentation. On primates? Not likely. They're not easy to obtain secretly and, except for the smaller gibbons, they should make potentially quite dangerous subjects for Dr. Gloge's project. So it must be humans he planned to work on."

Hammond nodded.

There was an almost sick expression on his face.

The woman looked up at him. "You seem very anxious. Presumably, Barbara and Vince have now had two injections each. That will take them to 50,000 years from now on some level. It doesn't seem desperately serious to me."

The man smiled tautly. "Don't forget that we're dealing with one of the seed races."

"Yes — but only 50,000 years so far."

He stared at her sympathetically. "You and I," he said, "are still far down on the ladder. So it's hard for us to conceive of the evolutionary potential of the *Genus homo galacticus*."

She laughed. "I'm content with my lowly lot —"

"Good conditioning," he murmured.

"— but I'm willing to accept your analysis. What do you intend to do with Gloge?"

Hammond straightened decisively. "This experiment on humans has to be stopped at once. Call Ames and have him put special security men at every exit. For the next hour, don't let Gloge out of this building.

And if Vince or Barbara try to enter the complex, tell him to hold them. When you've done that, start cancelling my appointments for the rest of the day and evening."

He disappeared into his bedroom, came out presently dressed for the street.

Helen Wendell greeted him with: "I called Ames, and he says 'Check!' But I also phoned Gloge's office. He left about an hour ago, his secretary says."

Hammond said quickly, "Sound a standby alert. Tell Ames to throw a guard around the homes of both of those young people!"

"You're going where?"

"First Barbara, then Vince. I only hope I'm in time."

A look must have come into Helen's face, because he smiled tensely and said, "Your expression says I'm getting too involved."

The beautiful blonde woman smiled with understanding, said, "Every day on this planet thousands of people are murdered, hundreds of thousands are robbed and countless minor acts of violence occur. People are struck, choked, yelled at, degraded, cheated—I could go on. If we ever opened ourselves to that, we'd shrivel away."

"I kind of like Barbara," Hammond confessed.

Helen was calm. "So do I. What do you think is happening?"

"As I see it, Gloge gave them the first injection last Wednesday and the second on Friday. That means the third one should be given today. That I've got to stop."

He departed hastily.

Gloge had become nervous. As Monday wore on, he kept thinking of his two specimens; and what bothered him was that he did not have them under observation on this last day.

What a ridiculous situation, he told himself. The greatest experiment in human history—and no scientific person watching it through to a conclusion of the key second injection.

There was another feeling, also. *Fear!*

He couldn't help but remember the young man. It seemed to Gloge that he had seen too many animals show in their fashion the symptoms he had observed in Vince. Failure to respond well to the serum, the signs of internal malaise, the sick appearance, the struggle of the cells visibly reflecting defeat in the efforts and chemistry at the surface of the skin.

And there was—he had to admit it—a further anxiety. Many of the unsuccessful animal specimens had developed tough fight-back characteristics. It would be wise to be prepared for emergencies of that nature.

He thought grimly: "No use fooling myself. I'd better drop everything and take another look at those two."

That was when he left his office.

He took it for granted that Barbara was all right. So he drove to Vince's apartment, and first checked with his audio pickups to make sure he was there and alone.

He detected at once movements; the sound of labored breathing, an occasional squeak of the springs of the couch. These noises came screeching through the hyper-sensitive receiver, but Gloge had the volume on them turned down so that they were not actually painful in his ears.

Gloge's spirits had already dropped even more, for the sounds he was hearing confirmed his fears.

Suddenly, all the justified scientific attitude that had motivated him until now came hard against the reality of the failure that was here.

By his previous reasoning, he would now have to kill Vince.

And that meant, of course, that he would also have to dispose of Barbara.

His state of funk yielded after what must have been many minutes to a strictly scientific thought: Mere sounds were not enough data for so basic a decision, it seemed to him.

He felt intense disappointment.

Now, he must go and make his decision from an actual meeting with Vince. It would be improper to dispose of his two human subjects without a face to face interrogation.

As Gloge climbed out of his car and headed for the apartment building, Vince had a dream.

He dreamed that the man — what was his name?—Gloge, with whom he had quarreled a few days before in the corridor at Research Alpha, was coming here to his apartment, with the intention of killing him. At some deep of his being, anger began. But he did not awaken.

The dream — product of his own disturbed, strange evolutionary development — continued.

From some vantage point, he watched Gloge approach his back door. He felt no surprise when the small, bald-headed man produced a key. Tense with fear, Vince watched as Gloge stealthily inserted the key into the lock, slowly turned it and quietly opened the door.

At that point, Vince's body was impelled by his extreme anxiety to defensive action. Millions of tiny, shining, cream-colored energy bundles were emitted by his nervous system. They resembled very short straight lines. And they passed through the wall that separated the living room from the kitchen, and they struck Gloge.

Great masses of the energy units unerringly sought out nerve ends in Gloge's body and darted in their scintillating fashion up to the man's brain.

The energy units were not the result of conscious analytical thought. They were brought into being solely by fright and carried pressor messages. They pushed at Gloge mentally, urging him to leave, to go back to where he had come from —

Dr. Gloge came to his senses with a start. He was back in his van. He remembered running in precipitant flight. He had a vague recollection of complete panic.

He sat now, trembling, breathing hard, trying to recover from the most disgraceful act of fear that he had ever experienced in his whole life.

And he knew that he had to go back.

Twice more, the sleeping Vince emitted enough energy bundles to compel Gloge to run. Each time the power available was less and Gloge retreated a shorter distance before stopping and forcing himself to go back again to the apartment.

On Gloge's fourth approach, the brain mechanism in Vince was able to manufacture only a small energy discharge. Gloge felt the fear rise in him, but he fought it—successfully.

He moved silently across the kitchen floor toward the door of the living room.

He still did not realize that the sleeping body and he had fought a battle—which he had now won.

Moments later, Gloge looked down at the exhausted form of his male subject. The sleeping body had perspired excessively. It trembled and moaned, and, as Gloge watched, jerked fitfully.

Unmistakably — Gloge decided — a failed experiment.

He wasted no time. He had come prepared. He pulled a pair of handcuffs from his pocket, carefully slipped one over Vince's farthest away arm and softly clicked it shut. He lifted the arm as carefully toward the other wrist and clicked that handcuff on also.

Gloge next successfully tied Vince's legs together, and then lashed together the hands and feet.

The victim continued his restless, feverish sleep.

Gloge brought out a gag. As he

had anticipated, forcing it into the closed mouth was more disturbing. Under him, the body grew rigid. Wild eyes flicked open and glared up at him.

In a single, convulsive effort Vince tried to bring up his arms and simultaneously struggled to get to his feet.

But Gloge had done his preliminary work well. The victim's intense effort subsided. Dr. Gloge realized that his control of this situation was complete. He removed the gag and said: "What I want to know is, how do you feel?"

The half-crazy, rage-filled eyes snapped with the impulse to violence. Vince cursed in a shrill voice. He kept this up for several minutes. Then he seemed to realize something.

"Y-you did something to me last week."

Gloge nodded. "I injected you twice with a serum designed to accelerate cellular evolution, and I've come here to find out how you are."

His gray eyes were steady, his bald head gleamed in the reflection of the light he had turned on. His face was serious. "Why not tell me exactly how you feel?" he asked earnestly.

This time Vince's cursing subsided after about a minute. He lay, then, staring at his captor, and something about the pale, tense face of the scientist must have convinced him. "I feel—awful," he said uneasily.

"Exactly how?" Gloge persisted.

Slowly, by dint of determined questioning, he drew from his reluc-

tant victim the fact that he felt weak, exhausted and numb.

It was the fateful combination that had so often shown in the animals; and Gloge knew that it was decisive.

Without another word, he bent down and started to force the gag into Vince's mouth. Vince twisted, wiggled, turned his head, and several times tried to bite. But inexorably Gloge pushed the gag all the way into the other's mouth and knotted it firmly behind his head.

He now went outside and drove the van into the driveway opposite the back door of Vince's apartment. Wrapping the young man's body in a blanket, he carried him boldly outside and into the van.

A few minutes later he was heading for the home of one of his subordinates. The man was on loan to an eastern laboratory and his house and yard were unoccupied.

If he had paused, if he had stopped moving, if he had even taken his foot off the accelerator, Gloge might have faltered in his grisly plan. But his only slowdown was when he finally brought the car to a stop at his destination. And that, in its real meaning, was a continuation of the plan.

Its final moments.

Laboriously, he dragged the gagged, handcuffed and bound Vince across the sidewalk, through a gate, and over to the deep end of the swimming pool. And still without pausing he shoved the tense body over the edge and into the water.

He straightened from his terrible act, stood there gasping for breath, exhausted, watching the trail of bubbles that roiled the dark surface. Abruptly terrified that he might be seen, he turned and staggered away.

As he half-fell, half-crawled into his car, the first opposing thought came, as much a feeling of horror as an idea: "My God, what have I done?"

But there was no opposing motion in that reaction. He did not go back. Instead, he sat there, bracing to the realization that a few feet away a man was still in process of drowning.

When there was no longer any doubt; when the subject of his experiment was by all laws of life dead, Gloge sighed, and stirred. There was no turning back. One gone, one to go.

Next — the girl!

From a phone booth a few blocks away, Gloge dialed Barbara Ellington's boarding house. The voice of an elderly woman answered and told him Barbara had gone out.

The voice added, "She certainly is a popular girl today."

Gloge said uneasily, "How do you mean?"

"Several men came by a little while ago and asked for her, but of course I had to tell them also that she wasn't here."

A sharp fear struck through Gloge. "Did they give their names?" he asked.

"A Mr. Hammond," was the reply.

Hammond! The chill of that froze Gloge. "Thank you," he gulped, and hung up.

He returned shakily to his car,

torⁿ between two impulses. He had intended to return after dark to the pool, fish Vince's body out of it, take off all the bindings and dispose of it. He had a strong feeling now that he should do that at once. On the other hand, he had a desperate conviction that he must return to his office and remove the rest of the serum from the safe there.

That last suddenly seemed the more important thing to do, and the safest at this hour. The sun had gone down below the western hills, but the sky was still bright blue. The dying day had too much light in it for the gruesome task of getting rid of a dead body.

IX

At ten minutes past seven, Dr. Gloge unlocked the door that led directly from the corridor to his office in the biology section of Research Alpha. He went in, closed the door behind him, walked quickly around the big, bare desk in the center of the room, and stooped down to unlock the desk drawer where he kept a key to one of the safes.

"Good evening, Dr. Gloge," a woman's voice said behind him.

For an instant Dr. Gloge seemed unable to move. The words, the tone, sent an electrifying hope through him. He could scarcely believe his luck: that the second person he had to dispose of had come to where he could best deal with her.

He straightened slowly, turned around.

Barbara Ellington stood in the

open door to the adjoining library, watching him, face serious and alert.

At no time in what followed did Gloge have any other *conscious* awareness than that this was Barbara Ellington.

But the very instant that he saw the girl, at some depth of his being neural readjustments took place. Millions of them. And from that instant, subconsciously, she was his dead sister. But she was not dead any more. She was reassuringly alive in the person of Barbara.

A look passed between them. It was one of complete understanding. It occurred to Gloge that it was scientifically wrong to kill this successful experimental victim. He even had a feeling that she was on his side and would cooperate with him. He suppressed a fleeting impulse to pretend not to know why she was here.

He said, matter-of-factly, "How did you get in?"

"Through the specimen room."

"Did any of the night workers see you?"

"No." Barbara smiled slightly.

Gloge was examining her with quick evaluative looks. He noted the way she stood, almost motionless but lightly and strongly balanced — a pose of contained, absolutely prepared energy. He saw in her eyes bright, quick intelligence.

The thought came to him: Nothing quite like this was ever on Earth before!

Barbara said suddenly, "You took a long chance on us, didn't you?"

The words that burst from Dr.

Gloge surprised him: "I had to do it."

"Yes, I know." Again she spoke matter-of-factly, moved forward into the room. Dr. Gloge felt a surge of alarm, a sharp, cold prickling of the skin. But she turned from him to the left, and he watched silently as she sat down in a chair against the wall and placed the brown purse she carried on the armrest of the chair. She spoke first.

"You must give me the third injection of the serum immediately," she told him. "I'll watch you do it. Then I'll take the instrument and a supply of the serum to Vince. He —"

She paused; blue eyes kindling with abrupt comprehension, as she studied Dr. Gloge's expression. "So you've drowned him!" she said. She sat there, thoughtful, then: "He's not dead. I sense him to be still alive. Now, what is the instrument you use? You must still have it with you."

"I do," Dr. Gloge admitted hoarsely. "But," he went on quickly, "it is advisable to wait till morning before administering the third shot. The chances of a further favorable development would be increased by doing it. And you must stay here! Nobody should see you as you are. There should be tests... you will tell me..."

He halted, realizing he was stammering. Barbara's eyes hadn't turned from his face. And in the same way that her knowledge of Vince's fate had not disturbed him — somehow, he took it for granted

that she realized and appreciated why and what he had done — so now her expression reassured him.

She said quietly, "Dr. Gloge, there are several things you don't understand. I know I can assimilate the serum. So give me the shot — and the serum — at once."

Barbara Ellington arose and started over toward him. She said nothing, and her face revealed no emotion, but his next awareness was of holding the jet gun out to her on his open palm as she came up.

"There's only one charge left."

She took the gun from his palm without touching him, turned it over, studied it, laid it back in his hand. "Where is your supply of the serum?"

Dr. Gloge nodded at the entrance to the library behind her. "The larger of the two safes in there."

Her head had turned in the direction he indicated. Now she remained still for a moment, gaze remote, lips parted, in an attitude of intent listening; then she looked back at him.

"Give me the injection," she told him. "Some men are coming."

Dr. Gloge lifted the gun, put the point against her shoulder, pulled the trigger. Barbara drew her breath in sharply, took the gun from him, opened her purse, dropped the gun inside and snapped the purse shut. Her eyes shifted to the office door.

"Listen!" she said.

After a moment, Dr. Gloge heard footsteps coming along the narrow corridor from the main laboratory.

"Who is it?" he asked anxiously.

"Hammond," she said. "Three other men."

Dr. Gloge made a stifled sound of despair. "We've got to get away. He mustn't find either of us here. Quick — through there." He waved toward the library.

Barbara shook her head. "This place is surrounded. All passages are guarded." She frowned. "Hammond must think he has all the evidence he needs against you—but don't help him in any way! Admit nothing! Let's see what I can do with my —" As she spoke she moved back to the chair on which she had been sitting. She settled into it, her face composed. "Maybe I can handle him," she said confidently.

The footsteps had reached the door. There came a knock.

Gloge glanced at Barbara. His thoughts were whirling. She nodded, smiled.

"Come in!" Dr. Gloge said harshly, too loudly.

Hammond entered the room. "Why, Mr. Hammond!" Barbara exclaimed. Her face was flushed, she looked embarrassed and confused.

Hammond had stopped, as he caught sight of her. He sensed a mental probing. His brain put up a barrier, and the probing ceased.

Their eyes met; and there was a flicker of consternation in hers. Hammond smiled ironically. Then he said in a steely voice:

"Stay where you are, Barbara. I'll talk to you later." His voice went up. "Come on in, Ames!" he called.

There was threat in his tone; and Dr. Gloge sent a quick, desperate, appealing glance at Barbara. She gave him an uncertain smile. The look of earnest, fumbling innocence

with which she had greeted Hammond had left her face, leaving it resigned but alert.

Hammond gave no sign of being aware of the change.

"Ames," he said to the first of the three men who came in through the library from the specimen room — Dr. Gloge recognized Wesley Ames, the chief of Research Alpha's security staff — "this is Barbara Ellington. Take charge of that handbag she's holding. Allow no one to enter this office. Miss Ellington is not to leave and is not to be permitted to touch any object in this room. She is to stay in that chair until I return with Dr. Gloge."

Wesley Ames nodded. "Understood, Mr. Hammond!" He glanced at his men, one of whom went to the office door and locked it while Ames turned to Barbara. She handed him her purse without comment.

"Doctor, come with me," Hammond said curtly.

Dr. Gloge followed him into the library. Hammond closed the door behind them.

"Where's Vince?" he said in an inexorable voice.

"Really, Mr. Hammond," Gloge protested. "I don't —"

Hammond stepped toward him abruptly. The movement seemed a threat. Dr. Gloge cringed, expecting to be manhandled. Instead, the bigger man firmly caught his arm and pressed a tiny metal object against his bare wrist.

"Tell me where Vince is!" Hammond commanded.

Gloge parted his lips to deny any

knowledge of Barbara's boy friend. Instead, the confession of what he had done poured forth from him. As he realized what he was admitting, Gloge tried desperately to stop himself from talking. He had already divined that the metal touching his skin was some kind of a hypnotic device, and so he tried to pull his arm from Hammond's grasp.

It was a vain effort.

"How long ago did you drown him?" Hammond asked.

"About an hour ago," said Dr. Gloge, hopelessly.

At that instant shouts came from the adjoining office. The door was pulled open. Wesley Ames stood there, ashen-faced.

"Mr. Hammond — she's gone!"

Hammond darted past him into the office. Dr. Gloge hurried after, legs trembling. As he reached the door, Hammond already was coming back into the office with one of the security men from the hall on the other side. Ames and the other men stood in the center of the office, looking about with stupefied expressions.

Hammond closed the door, said to Ames, "Quickly, now! What happened?"

Ames threw his hands up in a gesture of furious frustration.

"Mr. Hammond, I don't know. We were watching her. She was there in the chair... then she was not there, that's all. He—" he indicated one of the men — "was standing with his back to the door. When we saw she was gone, he was sitting on the floor next to the door!"

The door was open. We ran into the hall, but she wasn't there. Then I called you."

"How long had you been watching her?" Hammond asked sharply.

"How long?" Ames gave him a dazed look. "I had just taken my mother down the hall to the elevator—"

He stopped, blinked. "Mr. Hammond, what am I saying? My mother's been dead for eight years!"

Hammond said softly, "So that's her little trick. She reached to that deep of the heart where the pure, unsullied dead are enshrined. And I thought she was only trying to read my mind!"

He broke off, said in a clear, commanding voice:

"Wake up, Ames! You three have been gone from the world for a couple of minutes. Don't worry about how Miss Ellington did it. Get her description to the exits. If she's seen approaching by a guard, tell him to keep her at a distance at gun point."

As the three hurried from the office, he indicated a chair to Dr. Gloge. Gloge sat down, senses swimming, as Hammond took a pencil-shaped device from his pocket, pressed it, and stood waiting.

On the fifth floor of the Research Alpha complex, Helen Wendell picked up the small private phone at the side of her desk, said, "Go ahead, John."

"Switch all defense and trap screens on immediately!" Hammond's voice told her. "Gloge's drowned Strather — as an experimental failure. But the other one's

awake and functioning. It's hard to know what she'll do next, but she may find it necessary to get to my office as a way of getting out of this building fast."

Helen pressed a button. "Not this way she won't!" she said. "The screens are on."

X

Outside, it grew darker on that tense Monday night.

At eight-eighteen, Helen Wendell again picked up the small phone purring at the side of her desk in the Research Alpha complex, glanced over at the closed office door, and said into the receiver, "Go ahead, John."

"I'm here at the pool," John Hammond's voice told her. "We've just fished his body out. Helen, the fellow is alive. Some reflex prevented any intake of water. But we'll need an oxygen tent."

Helen's left hand reached for another telephone. "You want the ambulance?" she asked, starting to dial.

"Yes. You have the street number. Tell them to pull up at the side gate. We have to act swiftly."

"Police uniforms, also?" Helen asked.

"Yes. But tell them to stay in the cab unless needed. We're out of sight, behind a high fence. And it's dark. I'll come back with them. Has Barbara been apprehended?"

"No," Helen said.

"I really didn't expect she would be," Hammond said. "I'll question the guards when I get there."

Barbara had allowed Ames to escort her to the nearest elevator, while she continued to have him think that she was his mother.

Once in the elevator she pushed the up-button and came out presently on the roof. As she had already perceived, a helicopter was scheduled to take off. And, though she was not an authorized passenger, the pilot took her along believing her to be his girl friend. Her sudden arrival seemed perfectly logical to him.

A little later, he set her down on the roof of another building. And that, also, seemed the most natural act to him, her reason for going there obvious.

He flew off and promptly forgot the episode.

The hasty landing was an urgent necessity for Barbara. She could feel the new injection beginning to work. So in her scanning of the buildings flitting by below, she perceived one in which the upper floors were unoccupied.

"I'll try to make it down to some office," she thought.

But she didn't get beyond the top floor. She actually began to stagger as she went down the first steps from the roof. And there was no mistaking the out-of-control state of her body. To her left, a door opened into a warehouse-like loft. She weaved through it, closed it behind her, and bolted it. Then she half-lowered herself, half-fell to the floor.

During that evening and night she never quite lost consciousness. Blackout was no longer possible for

her. But she could feel her body changing, changing, changing —

The energy flows inside her took on a different meaning. They were separate from her. Presently they would be controllable again, but in another fashion entirely.

Something of Barbara seemed to disappear with that awareness.

"I'm still me!" the entity thought as it lay there on the floor. "Flesh, feeling, desire —"

But she had the distinct realization that "me" even in these early stages of the five hundred thousand year transformations was ME PLUS.

Exactly how the self was becoming something more was not yet clear.

The slow night dragged by.

XI

Tuesday. Shortly before noon, Helen Wendell came along the hallway that led from John Hammond's quarters to the main office. Hammond was sitting at the far side of her desk. He glanced up at her as she approached.

"How are the patients?" he asked.

"Gloge is role-perfect," Helen said.

"I even allowed him to spend part of the morning talking to his assistants here. He's already had two conversations by Telstar with Sir Hubert about his new task overseas. I've put him to sleep again, but he's available. When did you come in?"

"Just now. How's Strather?"

Helen tapped the recorder. "I checked with the MD machine on him twenty minutes ago," she said.

"It gave me its opinion in detail. I took it all down. Do you want to hear it?"

"Sum it up for me."

Helen pursed her lips; then: "The MD verifies that he didn't swallow any water, that some newly developed brain mechanism shut off breathing and kept him in a state of suspended animation. Vince himself has no conscious memory of the experience, so it was evidently a survival act of the lower brain. MD reports other developments are taking place in Vince, regards them as freakish in nature. It's too soon to tell whether or not he can survive a third injection. He's under sedation."

Hammond looked dissatisfied. "All right," he said after a moment. "What else do you have for me?"

"A number of transmitter messages," Helen said.

"About Gloge?"

"Yes. New Brasilia and Manila agree with you that there are too many chances of a revealing slip-up if Dr. Gloge remains at Research Alpha any longer than is absolutely necessary."

"You said Gloge is role-perfect."

Helen nodded. "At the moment. But he is a highly recalcitrant subject and naturally I can't give him the kind of final conditioning he'd get at Paris center. That's where they want him. The courier, Arnold, will take him aboard the Paris-jet at 5:10 tonight."

"No!" Hammond shook his head. "That's too early! Gloge is our bait to catch Barbara. His experiments indicate that she won't be able to

function until some time this evening. I calculate that somewhere around 9 o'clock will be a good time to let Gloge out from behind the defense screens."

Helen was silent a moment, then said, "There seems to be a general feeling, John, that you're over-estimating the possibilities of any really dangerous evolutionary developments in Barbara Ellington."

Hammond smiled tautly. "I've seen her. They haven't. Mind you, for all I know, she may be dead or dying of the effects of the third shot by now. But if she's capable of coming, I think she'll come. She'll want that fourth injection. She may start any time looking for the man who can produce the serum for her."

By Tuesday, a new awareness had come to Barbara.

She had developed brain mechanisms that could do things with space—do them on an automatic level, without her conscious mind knowing what, or how. Fantastic things . . .

As she lay there, a new nerve center in her brain reached out and scanned a volume of space 500 light-years in diameter. It touched and comprehended clouds of neutral hydrogen and bright young O-type stars, measured the swing of binaries, took a census of comets and ice asteroids. Far out in the constellation of Ophiuchus a blue-white giant was going nova, and the new, strange linkage in Barbara's mind observed its frantic heaving of spheres of radiant gas. A black dwarf emitted its last spray of infra-red light and

sank into the radiationless pit of dead stars.

Barbara's mind encompassed it all, and reached farther . . . reached out effortlessly until it touched a specific Something . . . and withdrew.

Brimming with ecstasy, Barbara cried out in her mind, *What did I touch?*

She knew it had been something the brain mechanism was programmed to search for. But no conscious perception was involved. All she could be sure of was that the nerve center seemed satisfied, and ceased its scanning.

But she sensed, in an intensely happy way, that it remained aware of What it had contacted.

She was still savoring the joy a while later when she became aware that the shifting energy flows inside her had resumed.

Gradually, then, she permitted her body and mind to sink into a receptive state.

Midsummer heat built up over the city throughout the day. In the locked room on the vacant top floor of the multi-storied building three miles from Research Alpha, the heat grew stifling as the sun shifted overhead, began to beat in through closed, unshaded windows. Barbara, curled on her side on the dusty floor, did not move. Now and then she uttered a moaning sound. Sweat ran from her for a long, long time, as the heat increased; then the skin of her face dried and turned dirty white. She made no more sounds. Even a close study would not have been able to prove that she still breathed.

By four o'clock, the sunblaze had shifted past the windows, and the locked room lay in shadows. But it was another hour before the temperature in it gradually began to drop. About six, the curled figure moved for the first time.

She straightened her legs slowly, then, with a sudden, convulsive motion, rolled over on her back, lay flat, arms flung loosely to the sides.

The right half of her face was smeared grotesquely with thick dust caked in drying sweat. She breathed — lay quiet again. Several minutes later, her eyelids lifted. The eyes were a deep, brilliant blue, seemed oddly awake and alert, though they remained unfocused and did not shift about the room. After a while, the lids slowly closed and remained closed.

The day darkened; the city's lights awoke. The empty warehouse stood silent. More than an hour passed before the figure in the room on the top floor moved again.

This time, it was motion of a different order. She rose suddenly and quickly to her feet, went to the nearest window and stood looking out through the dirt-stained glass.

The towering Research Alpha complex was a glow of white light to the west. The watcher's eyes turned toward it . . .

A second of time went by. Then the mind that directed the eyes moved on an entirely new level of extended perception.

Night-shift activities in the research complex were not essentially different from those of the day; but

there were fewer people around as the awareness that was Barbara drifted along familiar, lighted hallways, about corners, dropped suddenly to a sublevel which contained the biology section. Here she flicked through the main laboratory and up a narrow corridor, pausing before the door to Dr. Glöge's office.

She moved through the door, paused in the dark and silent office, then moved on into the library. She remained a minute or two above the big safe in a corner of the library. Then she knew.

The safe was empty — and trapped.

The awareness flicked out of the library, shifted to the fifth floor of the complex, drifted toward a great, black door showing the words: *Scientific Liaison and Investigation*. She stopped before it.

Minutes passed as she slowly and carefully scanned the outer walls of John Hammond's offices and living quarters. Here was something new . . . something that seemed very dangerous. Within the walls and doors, above the ceiling, below the flooring of this section, strange energies curled and crawled like twisting smoke.

She could not pass through that barrier.

But though she could not enter, her perceptions might, to some extent.

She must avoid, she decided, both the front entry door and the secret elevator which led directly to Hammond's living quarters in the rear of the section. As the most obvious points for an intruder to consider,

they were also the most formidably shielded.

She shifted back along the hall to a point some twenty feet away from the massive black door, well back from the wall between her and the front office. She waited. Gradually a picture began to form...

This was an unfamiliar room, the inner office of the section. There was no one in it, nothing of interest except a closed door across from the one which opened on the corridor.

The inner office disappeared... and what came next was no picture, but a surge of savage, demanding hunger.

Startled, shocked, already feeling the pull that in a moment would hurl her into the murderous barriers about the section, the searching awareness instantly broke the thread of visual perception, went inactive to allow herself to stabilize.

Nevertheless, she now knew where the serum was—in a strongroom of Hammond's quarters, heavily screened, seemingly inaccessible.

Perception cautiously opened again. Another section of the living quarters appeared, hazy with hostile energies. The other—the male counterpart—was here. Alive.

Here, but helpless. Here, but unconscious, in a cage of dark force which permitted no more than barest identification by the searcher. She was very glad he had been rescued.

Minutes later, she knew there was no one else in Hammond's locked quarters. She withdrew visual perception from there, and let the

picture of the main office develop. The blurred image of a woman—Helen Wendell—now seemed to be speaking into an instrument connected with the apparatus before her.

A second band of perception opened, and voices became indistinctly audible.

Ganin Arnold, the New Brasilia courier, was making his final call from the city jetport, nine miles south of the Research Alpha complex.

"The doors are being secured," he said. He was speaking into a disguised microphone clamped over his mouth and nose, which had the appearance of the tranquilizing respirators many of the other jet passengers were using now in the last moments before lift-off. Even to anyone within inches of him, his voice would have remained completely inaudible. In John Hammond's office, it emerged clearly from the device on Helen Wendell's desk.

"Lift-off for the nonstop jet to Paris," Arnold went on, "will follow—" he glanced at the watch on his wrist—"in two minutes and thirty seconds. All passengers and every member of the crew have passed at least once through the measurement radius. Nothing which may have preceded or followed myself and our biologist aboard registers life energy levels significantly above the standard Earther range—that is, of course, below six.

"To sum it up, we definitely are *not* being accompanied to Paris by any abnormally high human evolutionary form. Dr. Gloge's behavior



has been excellent. His tranquilizer has begun to take effect and he is showing signs of drowsiness. Undoubtedly, he will sleep soundly throughout the trip."

Arnold paused, apparently waiting for comment. When there was none, he resumed, "As soon as the lift-field goes on, communication by this means, of course, will be impossible. Since nothing is likely to go wrong from this moment on, I suggest, if it's satisfactory to Mr. Hammond, that I end my report now."

Helen Wendell's voice, seeming to speak from a point just within the left side of the courier's skull, told him pleasantly, "Mr. Hammond prefers you to remain alert and available for final instructions until the lift has begun."

XII

In the locked room on the top floor of the empty warehouse a few miles east of Research Alpha, the woman-shaped standing at the window stirred suddenly out of the tranced immobility it had maintained for the past minutes. The head lifted, gaze sweeping the softly glowing night-sky above the city. A hand moved, touching the thick windowpane probingly. The glass fell away like a big drop of melting ice.

Dust swirled as cool air rushed in.

Barbara waited, then moved closer to the opening.

Her gaze swung to the west again, remained there. She listened. The myriad noises of the city were clear

and distinct now. Overlying them was a thin fountain of sky-sound as, every thirty seconds — at this hour — a jet lifted vertically from the city port, cut in its engines and vanished up into the night with a whistling shriek. Her head shifted quickly briefly following the changing pattern of the sound. Then it steadied.

Her gaze rose slowly, slanting to the north, following a moving, distant point in the night, eyes narrowed with intentness.

On board the Paris jet which had left the city port a few minutes before, Dr. Henry Gloge now had a very curious experience. Drowsily, almost on the verge of sleep, he had been contemplating the pleasant significance of his assignment today to Sir Hubert Roland's Paris Project. Suddenly, then, there was a sensation of coming partly awake.

He gazed around him with a rising sense of alarm, looking first of all at his seat companion.

The fellow was big, heavily built. He looked like a police detective, and Gloge knew that the man was his guard. The curious thing was that he was slumped back in the seat, head lolling forward, eyes closed... typical indications of a tranquilized stupor.

Gloge thought: "Why is he asleep?" He had a strong conviction that it was he who should be unconscious. There was a clear memory of a device — an instrument totally unfamiliar to him — which the Wendell woman had used to implant a complete, compelling set of delusions in his mind. He had

come willingly aboard the jet. And he had, at the suggestion of his guard, inhaled enough tranquilizing gas from the seat respirator to have kept him somnolent until the jet touched down in Paris.

Instead, minutes later, he had come awake, the delusions of the day slipping from his mind!

There must be an explanation for these apparently contradictory events.

The thought ended. A feeling of blankness held him for a moment. Then came a churning wave of terror.

Somewhere a voice had said:

"Yes, Dr. Gloge — there is an explanation for this!"

Slowly, against his every inclination but completely unable to withstand the impulse, Dr. Gloge turned, looked back. There was someone in the seat behind him.

For an instant, it seemed to be a complete stranger. Then the eyes opened. They fixed on him, glowing brilliant demon-blue, even in the muted light of the jet.

The woman spoke, and it was the voice of Barbara Ellington. "We have a problem, Dr. Gloge. There seems to be a group of extra-terrestrials on this planet, and I still do not have any clear idea of what they are doing here. That's our immediate task — to find out."

"You are where?" Helen Wendell said sharply.

Her hand flicked to the right, snapped a switch. A small view-screen on the right side of the desk lit up. She said, "John — quick!"

In the inner office, John Hammond turned, saw the lit screen on the desk behind him. An instant later he was listening to the words tumbling hoarsely from the telephone speaker on his left. He said to Helen's tense, pale profile in the screen to the right, "Where is he?"

"At the Des Moines jetport! The Paris jet put down for emergency repairs. Now nobody seems to understand just what was wrong with it or what repairs are needed. But the passengers have been disembarked, are to be transferred to another jet. Arnold's in a state of confusion and shock. Listen to him!"

"—there was a woman with him," the courier's voice babbled. "At the time, I thought it was one of the passengers who had come off the jet with us. Now I'm not sure. But I simply stood there and watched the two of them walk out of the hall together. It never occurred to me to ask myself why this woman was with Gloge, or to stop them, or even to wonder where they were going . . ."

Hammond twisted a dial, dimming the voice. He spoke to Helen Wendell. "When did the jet come down?"

"From what Arnold said first," Helen told him, "it must have been over half an hour ago! As he puts it, it didn't occur to him to call us about it until now."

"Half an hour!" Hammond came to his feet. "Helen, drop everything you're doing! I want an off-planet observer sitting in on this, preferably within minutes."

She gave him a startled look. "What are you expecting?"

"I don't know what to expect."

She hesitated, began: "The Wardens . . ."

"Whatever can be done here," Hammond said, "I can do myself. I don't need anyone else for that. The defense screens on the northern side will go off for exactly forty seconds. Now move!" He snapped off the screen, reached under the desk, threw over another switch.

In the main office, Helen Wendell stared at the blank screen for a moment. Then she jumped to her feet, ran across the room to the entry door, pulled it open and slipped out into the hall. The door swung shut behind her.

Some moments later, John Hammond entered the room behind his private office where Vincent Strather lay enclosed by a trap screen. Hammond went to the wall, turned the trap controls there halfway to the off point.

The screen faded into smoky near-invisibility, and he stared for a few seconds at the shape stretched out on the couch within it. He asked aloud, "There have been no further internal changes?"

"None within the past two hours," the MD machine's voice said from the wall.

"This form is viable?"

"Yes."

"He would awaken if I released the screen?"

"Yes. Immediately."

Hammond was silent a moment, then asked, "You have calculated the effects of a fourth injection of the serum?"

"Yes," the machine said from the wall.

"In general, what are they?"

"In general," the machine said, "there would be pronounced changes and at an again greatly accelerated rate. The evolutionary trend remains the same, but would be very much advanced. The resultant form would stabilize within twenty minutes. It would again be a viable one."

Hammond turned the trap screen controls full over to the left. The screen darkened once more into a dense, concealing shroud.

It was too soon to make the decision to give the fourth shot. Perhaps — mercifully — it could be avoided altogether.

XIII

At half past ten, the long-distance signal sounded from the telephone screen. Hammond glanced around from the portable control box on the desk, simultaneously pressed the answer button and the stud which would leave him unseen if the caller's instrument was equipped with a viewscreen, and said, "Go ahead!"

The screen remained dark, but somebody made a gasping sound of relief. "*Mr. Hammond!*" It was a reedy, quavering voice, but it was distinctly the voice of Dr. Gloge.

There were two sharp clicks from one of the instruments lying on the desk — a signal from Helen Wendell, in the observer boat standing off Earth, that she was recording the conversation.

"Where are you, Doctor?"

"Mr. Hammond . . . something terrible . . . that creature . . . Barbara Ellington —"

"She took you off the jet, I know," Hammond said. "Where are you now?"

"My home — in Pennsylvania."

"She went there with you?"

"Yes. There was nothing I could do."

"Of course not," Hammond said. "She's gone now?"

"I don't know where she is. I took the chance of phoning. Mr. Hammond, there was something I didn't know, didn't remember. But *she* knew. I . . ."

"You had some Omega serum in that farm laboratory?" Hammond asked.

"I didn't think of it as that," Dr. Gloge's voice told him. "It was an earlier experimental variant — one with impurities which produce a dangerously erratic reaction. I was under the impression I had destroyed my entire stock. But this being knew better! It brought me here, forced me to give it what was left of the serum. The quantity was small —"

"But enough for a standard fourth shot of the series?" Hammond said.

"Yes, yes, it was sufficient for the fourth injection."

"And she has now taken it as an injection?"

Dr. Gloge hesitated, then he said, "Yes. However there is reason to hope that instead of impelling the evolutionary process in what I now regard as a monstrous creature on to its next stage, the imperfect serum will result in its prompt destruction."

"Perhaps," said Hammond. "But

almost since you first launched Barbara Ellington into this process, she appears to have been aware of what was possible to her. I can't believe she's made a mistake now."

"I..." Dr. Gloge paused again, went on: "Mr. Hammond, I realize the enormity of what I've done. If, in any way, I can help avert the worst consequences, I shall cooperate to the fullest extent. I —"

There was a sharp click as the connection was broken, a pause, then Helen Wendell's voice whispered into Hammond's ear, "Do you think Barbara let him make that call, then cut him off?"

"Of course."

Helen made no further comment, simply waited; and presently, softly, Hammond continued: "I think she wants us to know that she's coming here."

"I think she's there now," said Helen. "Good-by."

XIV

John Hammond glanced at the control box on the desk, and saw the flickering indicators. He also saw a wholly unexpected reaction: A condition of non-energy that actually canceled energy.

"Helen," he said. "This woman has gone up somewhere out of our reach! What you're seeing is energy trying to maintain itself against anti-energy. I received recognition drilling on such things, but I've never seen it before in an actual situation."

Helen Wendell, eyes fixed on a duplicate check screen in the distant observer boat, did not reply. A

shifting electronic storm was blazing through the check-screen indicators; it showed that the defensive forces enclosing Hammond's office and living quarters were coming under a swiftly varying pattern of attack... presently that they were being tested almost to the limit.

It held that way for over a minute — every reading almost impossibility high, barely shifting.

"John Hammond!" the desk top said softly to Hammond.

He jerked slightly away, eyes flicking down to it.

"John Hammond!" the chair whispered beside him.

"John Hammond!" "John Hammond!" "John Hammond!" "John Hammond!" "John Hammond..."

His name sprang at him from every part of the office, in a swirling, encircling pattern. Because of his special supervisory position, Hammond knew the pattern and its danger. It had never been considered probable, but nevertheless *they* had taken the possibility into account and so he had outside power available to deal with this emergency.

He looked hurriedly about on the desk for an instrument he had laid down among the others there. For an instant, he seemed unable to recognize it, and there was an icy touch of panic. Then he realized he already held it in his hand. He ran a knob up along its side with his thumb, locked it into place, laid the instrument back on the desk.

A rasping came from it. Not only a sound, but a vibration, a rough, hard shuddering of the nerves. The voice-ghosts sank to a whisper,

flowed from the room. Helen Wendell's tiny, distant voice stabbed at Hammond's ear like a needle:

"The check screen! She's leaving!" Hopefully.

"You're certain?"

"Not really." Alarm whipped at him through Helen's voice. "What does your screen show?"

"A subjective blur at the moment. It's clearing."

"What happened?"

"I think she felt above us and so she took it for granted that she could walk all over us. Accordingly, she's just had the surprise of her brief existence as a sub-galactic super-woman. She didn't realize we represent the Great Ones."

"Is she damaged?"

"Oh, I wouldn't say that. She's learned too much. But... details later." Hammond blinked at the check screen, swung around toward the door of the adjoining room, pulled it open.

"Administer the final injection to the subject!" he said sharply into the room. "Acknowledge!"

"The fourth and final injection of the Omega Stimulation series will be administered to the subject," the machine replied.

"Immediately!"

"Immediately."

Helen's voice reached Hammond again as he drew the door shut and came back to the desk. "At moments," she said, "the anti-energies were holding the ninety-six point of overload. Within four of the theoretical limit. Did she get to you at the energy balance?"

"Very nearly," Hammond told her. "A very high-energy, pseudo-hypno trick that didn't quite work. And she'll be back. I still have something she wants!"

On his desk, the telephone screen blurred. When he turned it on, the voice of Dr. Gloge sounded in his ears.

"We were cut off earlier, Mr. Hammond." The biologist's voice was strongly even and controlled.

"What happened?" Hammond asked warily.

"Mr. Hammond, I have finally analyzed what evolution really is. The universe is a spectrum. It needs energies in motion at all levels. This is why those at the higher levels do not interfere directly with individual activities at the lower. But this is also why they are concerned when a race reaches the point where it can begin to manipulate large forces."

Hammond said steadily, "Barbara, if the purpose of this call is to find out if I'll let you in, yes, I will."

A pause, then a click. Then there was a tiny, momentary flickering in one of the check screen indicators. Then, in a different section, another.

"What's happening?" Helen asked tautly.

Hammond said, "She's coming through the screens, with my permission."

"Do you think it's a trick?"

"In a way. For some reason, she hasn't let herself reach that theoretical, final million-year point on Dr. Gloge's evolutionary scale. That may come a little later."

"And you're actually letting her in, believing that?"

"Of course." Helen did not answer him.

A minute went past in silence. Hammond shifted so that he faced the door, moved a few steps away from the control box and the desk, and stood waiting.

A small light burned red in a corner of the check screen. Something had come into the main office.

The heavy silence continued for some seconds. Then, on the hard flooring at the far end of the corridor, Hammond heard footsteps.

He couldn't have said what he had been expecting ... but certainly nothing so commonplace as the sound of a woman's high-heeled shoes coming briskly toward the inner office.

She appeared in the doorway, stopped there, looking at him. Hammond said nothing. All outer indications were that this was the Barbara Ellington he had seen sitting in a chair in Dr. Gloge's office the night before. Nothing had changed either in her looks or in her clothing; even the brown purse she held in one hand seemed the same. Except for the air of radiant vitality, the alertness of her stance, the keen intelligence in her face, this also was, in fact, the awkward, overanxious, lean girl who had worked in the outer office for less than two weeks.

And therefore, Hammond thought it was a phantom! Not a delusion; he was protected now against any attempt to tamper with his mind in that manner by barriers which would break only if he died. The shape standing in the door was real. The

instruments recorded it. But it was a shape created for this meeting — not that of Barbara Ellington as she was at this hour.

He was unsure of her intention in assuming it. Perhaps it was designed to throw him off guard.

She came into the room, smiling faintly, and glanced about. Hammond knew then that he hadn't been mistaken. Something had come in with her ... something oppressive, spine-tingling; a sense of heat, a sense of power.

The curiously brilliant, blue eyes turned toward him; and the smile deepened.

"I'm going to have to test why you're still here," she said carelessly. "So defend yourself!"

There was no sound; but a cloud of white light filled the air between them, enveloping them; faded; flared silently; faded again. Both stood unmoving, each watching the other. Nothing in the office had changed.

"Excellent!" the woman said. "The mystery behind you begins to reveal itself. I know the quality of your race now, John Hammond. Your science could never control the order of energies that are shielding you mentally and physically here!

"There should be other indications then that in extreme necessity you are permitted to employ devices created by beings greater than yourself — devices which you do not yourself understand. And where would such devices be found at the moment? ... Over there, I believe!"

She turned toward the door of the adjoining room, took three steps,

and halted. A rose-glowing haze had appeared before the door and the surrounding sections of wall and flooring.

"Yes," she said. "That comes from the same source! And here —"

She turned, moved quickly toward the control box on the desk, checked again. A rose haze also enveloped the box now.

"The three points you must consider vital here!" she said nodding. "Yourself, the being in that room and the controls of the section. You may safeguard these at the expense of revealing a secret you would otherwise least want to reveal. Now I think it is time for us to exchange information."

She came back to Hammond, stopped before him.

"I discovered suddenly, John Hammond, that your kind are not native to Earth. You are superior to Earth's humanity, but not sufficiently superior to explain why you are here. You have an organization on this world. But it is a curious organization. It does not appear to serve the purposes of conqueror or exploiter . . . But let's leave it at that. Don't try to explain it. It doesn't matter. You are to release the human male who was to have received the series of serum injections with me. You and the other members of your race stationed here will then remove yourselves promptly from this planet. We have no further use for you."

Hammond shook his head.

"We might be forced off the planet," he said. "But that would make Earth an active danger

spot. The Great Galactics whom I represent do have servant races who carry out military assignments for them. It would not be to your advantage if such a race were to occupy or quarantine Earth to make sure that the seedling race here continues to receive the necessary degree of supervision."

"John Hammond," the woman-shape said, "whether the Great Galactics send military servants to Earth or come here themselves is a matter that does not concern me in the least. It would be very unwise of them to do either. Within hours from now, the Omega serum will be available in limitless quantities. Within days, every man, woman, and child of Earth will have gone through the full evolutionary sequence. Do you think Earth's new humanity could still be supervised by any other race?"

"The Omega serum will never be used again," Hammond said. "I'll show you why . . ."

Hammond turned, went to the control box on the desk. The rose haze faded before him, appeared behind him again. He threw a switch and the haze vanished. He turned away from the controls. "The energy fields that kept you out of that room are being shut off," he said. "In a moment, the door will open. So see for yourself — the barriers are off."

Except for the blazing blue of the eyes, her face was a cold mask. Hammond thought she must already know what was there. But she turned, went to the open door, and stood looking into the room. Hammond moved to the side of the desk

where he could look past her . . .

The energy trap enclosing the couch in the room had vanished. The dark thing on the couch was just sitting up. It shook its head dazedly, rolled over and came up on all fours.

Its huge, dull-black eyes stared at them for an instant; then it straightened, rose to its full height . . .

To a full height of twenty-two inches! It swayed unsteadily on the couch—a hairy little figure with a wide-mouthed, huge-eyed goblin head.

Its eyes blinked in vague recognition. The mouth opened. It cried in a thin, bleating voice:

“Bar-ba-ral!”

XV

The woman wheeled, turning away. She did not look back at the grotesque little figure. But a faint smile touched her lips as she gazed at Hammond. “All right,” she said, “there goes my last tie with earth. I accept what you said. I gather that the Omega serum is a unique development and that it hasn’t shown up elsewhere in the galaxy.”

“That is not a literal truth,” said Hammond.

She nodded toward the adjoining room. “Then perhaps you can tell me what went wrong.”

Hammond told her Gloge’s two-fold theory: that at this stage of man’s evolution many possibilities remained for evolvement, and that apparently the serum stimulated one of these and thereafter was bound

by natural law to follow that line of development.

As he talked, he was watching her, and he was thinking: “This problem isn’t resolved. How are we going to deal with *her*?”

He sensed an almost incredible strength, an actual, palpable force. It poured from her in a steady stream of power.

He continued tensely: “The Great Galactics, when planting their seed on a new planet, have never interfered with the basic characteristics of the various races that live there. They interject selected bundles of their own genes by grafting into thousands of men and women on every continent. As the generations go by, these bundles intermix by chance with those that are native to the people of the planet. Apparently, the Omega serum stimulates one of these mixtures and carries it forward to whatever it is capable of, which, because of the singularity factor, usually leads to a dead end.”

“The singularity factor—?” Her words were a question.

Men, Hammond explained, were born of the union of a man and a woman. No one person carried more than a portion of mankind’s genes. As time passed, the interaction and interrelation of all the genes occurred; the race progressed because billions of chance intermixings of different bundles took place.

In Vince, one such bundle had been stirred, been whipped up to its ultimate point by repeated Omega Stimulation—but evidently that particular bundle had strictly limited possibilities, as would always be

the case when a single person was bred, so to speak, with himself . . . the singularity factor.

And that was what had happened to Vince and herself. They were products of the most fantastic in-breeding ever attempted — life surviving through one line, a kind of incest carried to some ultimate sterility, fantastic, interesting, freakish.

“You are wrong,” said the woman-shape softly. “I am not a freak. So what has happened here is even more improbable than I have realized. In myself, it was the galactic seedling bundle of genes that was stimulated. Now, I understand what it was I contacted out in space. One of them. And he let me. He understood instantly.”

She added, “One more question, John Hammond. Omega is an unusual term. What does it mean?”

“ . . . When man becomes one with the ultimate, that is Point Omega.”

It seemed to Hammond that, even as he finished speaking, she was growing remote, withdrawing from him. Or was it that it was he who was withdrawing? Not only from her but from everything — drifting away, not in any spatial sense, but, in some curious fashion, away from the reality of the entire universe? The brief thought came that this should be an alarming and disturbing experience. Then the thought itself was forgotten.

“There is something occurring,” her voice was telling him. “In the small thing behind the door, the Omega evolutionary process is com-

pleted, in its fashion. In me, it is not completed — not quite.

“But it is being completed now . . .”

He was nowhere and nothing. New word-impressions, new thought impressions came suddenly and swept through him like the patter of rain.

The impressions took form. It was later in time. He seemed to be standing in the small room next to his office, looking down at the lanky, redheaded young man sitting groggily on the edge of the couch holding his head.

“Coming out of it, Vince?” Hammond asked.

Vincent Strather glanced uncertainly up at him, ran his hand over the jagged rent in the sleeve of his jacket.

“I guess so, Mr. Hammond,” he muttered. “I . . . what happened?”

“You went for a drive tonight,” Hammond told him, “with a girl named Barbara Ellington. You’d both been drinking. She was driving . . . driving too fast. The car went off a highway embankment, turned over several times. Witnesses dragged you to safety minutes before the car burst into flames. The girl was dead. They didn’t attempt to save her body. When the police informed me of the accident, I had you brought here to Research Alpha.”

As he spoke, he had the stunning realization that everything he was saying was true. The accident *had* happened late that evening, in exactly that manner.

“Well . . .” Vince began. He broke

off, sighed, shook his head. "Barbara was an odd girl. A wild one! I was pretty fond of her once, Mr. Hammond. Lately, I've been trying to break off with her."

Hammond received the impression that much more had happened. Automatically, he looked back through the open door as the private telephone in the inner office signaled. "Excuse me," he said to Vince.

As he flicked on the instrument, Helen Wendell's face appeared on the phone screen. She gave him a brief smile, asked, "How is Strather?"

Hammond didn't reply at once. He looked at her, feeling cold, eerie crawlings over his scalp. Helen was seated at her desk in the outer office. She was not in a spaceboat standing off the planet.

He heard himself say, "He's all right. There is very little emotional shock . . . How about you?"

"I'm disturbed by Barbara's death," Helen admitted. "But now I have Dr. Gloge on the phone. He's quite anxious to talk to you."

Hammond said, "All right. Put him on."

"Mr. Hammond," Dr. Gloge's voice said a moment later, "this is in connection with the Point Omega Stimulation project. I've been going over all my notes and conclusions on these experiments, and I'm convinced that once you understand the extraordinary dangers which might result if the details of my experiments became known, you will agree

that the project should be closed out and any records referring to it destroyed at once."

After switching off the phone, he remained for a while at the desk.

So that part of the problem also had been solved! The last traces of the Omega serum were being wiped out, would soon linger only in his mind.

And for how long there? Perhaps no more than two or three hours, John Hammond decided. The memory pictures were paling; he had a feeling that sections of them already had vanished. And there was an odd, trembling uncertainty about what was left . . . thin, colored mind-canvas being tugged by a wind which presently would carry it off —

He had no objections, Hammond told himself. He had seen one of the Great Ones, and it was not a memory that it was good for a lesser being to have.

Somehow, it hurt to be so much less.

He must have slept. For he awoke suddenly. He felt vaguely bewildered, for no reason that he could imagine.

Helen came in, smiling. "Don't you think it's time we closed up for the night. You're working too long hours again."

"You're right," Hammond nodded.

He got up and went into the room next to the office to tell Vincent Strather he was free to go home.

END

THE LAST EARTHMAN

by LESTER del REY

He was the last Earthman of all — even though he came from the farthest of stars!

Egon lashed the tiller but let the little atomic jet go on driving the heavy dugout slowly toward the morning sun. He stood up, breathing in deeply, feeling the muscles ripple under his drying deerhide clout.

The wind was rich with sea tang and the savory smell of the fish that Cala was frying over a brazier. His mouth was already watering as he went forward to take a plate from her.

In the bow, old Herndon was nibbling with more relish than he had shown for months. The mark of approaching death was heavy on the emaciated face of the last earthman, but it was relaxed now, as if the pain from the malignancy had finally ceased. He made room for Egon beside him, shredding the fish with a willow fork.

"The seas are fertile again, like the land. Only we —" He sighed,

then made a tired shrug. "Could any world be as beautiful or bountiful as this mother planet, Egon?"

"No, Herndon. Certainly not bountiful."

But it was Egon's turn to sigh as he remembered the red winds over the plains of Dale and the forests beyond that had gleamed pale in the double moonlight. And there were the roofed cities filled with people who had gone a thousand years beyond the final culture of the Earth. Yet his words had been true; there was no bounty to Dale or the other settled planets. The seeds men had carried with them had all died before means could be found to make them adapt. The native growths were poisonous or foul. Food had to be synthesized there from the raw elements.

It was almost twenty years since Egon had climbed out of the wreck-

age of his little planet-prospecting ship after the explosion of his motor had forced him to land here. And even now, his night dreams were filled with the people and cities of Dale and the synthetic feasts at his mother's table.

Herndon had stopped toying with his food and sat watching the faint wake where the little tender bobbed along on a line behind them. "And you say they've forgotten earth out there, Egon? They've mislaid the world that bore them?"

"There's a vague legend of a mother world, but we're taught it was destroyed completely," Egon told him for the hundredth time. "I suppose the location was forgotten during the first centuries of taming the new planets."

The old man swung about to face forward where he could sweep his eyes over the deserted sea. He nodded sadly to himself. "Yes, they must have forgotten. If they remembered only a little of this, they'd be back."

Egon went aft to the tiller while the gulls swooped down and fought over what Cala scraped from the plates. The atomic jet purred on. It was one of the few things he had been able to make from the salvage of his wrecked ship. The shore was a smudge behind them and ahead he thought he could just see the ruined Ember Stake projecting from the sea that had buried it so long ago.

Ahead, Herndon was telling bits of the past to the ever-silent Cala, and Egon filled it in from all the times he had heard the tale.

The stories he'd learned as a child

were at least partly true. A thousand years before, a key discovery made faster-than-light travel to the stars simpler than rocket flight to the moon and also showed a simple way to convert mass directly to energy. A million colonists went out to the stars within a decade, and the Great Age began.

It ended. An unthinkable global war broke out, powered by material energy. Its violence was enough to change the climate permanently, until now the polar ice was gone and the former coast line lay more than three hundred feet below sea level.

Despite the legends of Dale, Earth survived and most of its life went on. Only man failed. Somehow, tens of thousands survived and were gathered together to start anew. But the old fecundity had been destroyed by some mutation that revealed itself slowly as too few viable children were born.

When Egon landed, only nine adults and a child named Cala were left to find him. Now there was only Cala.

The sun rose steadily as the dug-out drove on. Ahead of him, Egon could see clearly the wreck of Ember Stake and the projections of other buildings that had once towered high over a city called New York. He saw Cala open her mouth silently now as if to intone old chants. She began to genuflect as they drew nearer.

She was doing the traditional reverence to the Guardian, without seeming to care that old Herndon beside her was the living man her

people had worshipped so long. He was the Cold Sleeper provided by the scientists after the holocaust, meant to revive from his suspended animation high in Ember Stake and bring mankind back to its ancient glories. He was the man who slept for a thousand years—until Egon accompanied the annual pilgrimage and found the faulty mechanism that had failed and repaired it. Now, after nineteen years of futility, he was going back to his ancient resting place only to die.

He was the last earthman, sitting beside a sterile girl.

Egon shut off the jet and let the dugout drift to a stop as the ancient pile of ruin reared high above him. He could not trust the boat too close where jagged metal girders might lie below the surface. Then he sat for a moment staring at the tip of the building, trying to picture it as it had been described.

Earth had been proud once, he thought. Men had never built like this elsewhere. Even when lower gravity might have made it easier.

He pulled the little tender up and turned to help Herndon as the old man moved back to the stern. But the earthman shook his head, motioning to Cala, whose eyes were burning eagerly.

"Let her go first," he said. "Now that we're here, I'm in no hurry. And my presence would only make mockery of her ritual."

Egon nodded. "Go ahead, Cala."

She was over the side of the dugout at once, carrying her little bundle of tribute. Then she began

paddling toward the entrance hole in a slow, ancient rhythm. She stopped from time to time to make obeisance and mouth silent chants. It seemed to take her forever to cover the first hundred feet.

There was a fond but wry smile on the old man's pale face as he watched her. "Maybe I'm no better, Egon. But sentimentality grows as the hours shorten. I've come back to worship the past in my own way and die among my relics."

"I understand," Egon' told him. But there would be no friend to ferry him back to the ashes of his fathers and the altars of his gods on Dale when his time came. There was no star-spanning dugout ready for him.

He shook off his thoughts and went forward for his fish spear. By the time the girl returned, they would all be hungry again. He checked the wire wrapping of the tip and the well-greased shaft automatically, then leaped lightly overboard.

Swimming had been a horror to him at first, a thing unknowable on dry Dale. But now he caught his breath without thinking and went downward into the clear green depths, driving himself with easy, powerful strokes of his legs. The water slid over him, resisting him and buoying him as free fall could never do. He turned and rose, caught his breath, and dropped again. It was only after several minutes that he bothered to look for prey.

The waters were rich. He found his choice almost at once. A moment later he was over the rail with his prize.

He saw the thing before Herndon's scream registered on his ears. It was high above the Ember Stake, slanting majestically through the air with a metallic glint in the sunlight.

A spaceship for colonists, here on Earth!

The dugout suddenly lurched into motion toward the tower, almost throwing Egon overboard. He twisted, to see Herndon pounding at the controls and screaming protests. But the old man wasn't looking at the ship. He was staring at the tip of the ruined tower.

There was movement there. Something thin and sharp slid from a hidden opening and was swinging out to point at the ship. Then it found its aim and came to rest.

Nothing seemed to emerge from the weapon. But the engine room of the ship at the rear suddenly exploded outwards and bits of motors began blowing away and down. The ship lurched into a tumbling dive, before the little atmospheric ion jets could cut on.

"Automatic missile killer — seeks and triggers material energy motors," Herndon cried as Egon grabbed the controls. "I thought they were all ruined. My fault, Egon, my fault!"

"They aren't dead yet," Egon shouted back. He was driving for the tower, paying no attention to any submerged danger. The ship was only tumbling slightly now, but it would land too far west for him to see clearly, except from the higher tower.

He knew now what must have wrecked his own ship, though he

had been higher when it happened. And from his own experience, he knew that the weapon was harmless against living tissue.

He grounded the dugout carelessly against the entrance to the Ember Stake and sprang through the breached wall to the old stairway the pilgrims had used. He shouted for Herndon to wait, but heard the old man puffing behind him. Then he was in the Guardian room, staring westward. He could just make out the great splash as the ship touched water, then heard Herndon beside him and felt binoculars thrust into his hand a minute later.

The ship was floating, though it could not remain up long. But like most colonist ships, it was equipped better than freighters. Through the binoculars, Egon saw inflated rafts thrown out, and tiny figures beginning to emerge. There were twenty of the rafts paddling toward the distant northern shore when the great ship finally went under.

"They're alive — at least most of them," he reported.

He heard Herndon's breath catch in a choking gasp, felt the old man relax back away from him. "Thank God!" he heard.

When he finally looked back from the retreating rafts, the last earthman was dead, still smiling through a froth of blood, slumped against the mechanism that had kept him frozen for a millenium. And Cala had come to them, staring in shock and doubt.

There was little Egon could do for this oldest and longest friend of his. He wiped the emaciated face, com-

posed the limbs, and began moving the body into the freezer-sarcophagus. Seeing this, Cala seemed to reorient herself and began helping. Egon turned on the freezer, bent his head, and felt a wordless sob tear in his throat as his only farewell. Cala began backing from the room, and he joined her without thinking, genuflecting at the door with her.

Then there was no time for any thoughts except for the rafts and the men there. Egon caught Cala's hand and drew the mute girl with him back to the dugout. Getting back through the near wreckage took longer than the heedless trip in. It was a quarter hour before the boat was moving west again at full speed, heading for where the rafts had left the spaceship. The sun was already beginning to sink again. There was a wind from the shore, bringing a faint smell of pine to enrich the tang of the sea.

There was almost no sign of the ship, now probably lying in fifty fathoms of water. Only a few tiny bits of meaningless wreckage were still afloat. Cala caught one up suddenly, and he saw that it was a thin plastic bag. At her puzzlement, he reached forward and opened it. It must have been hastily packed by one of the intended colonists, then somehow dropped. There was a dental gilder, a box, and a small book of color pictures.

Dale! The scenes were of Dale, Egon saw. Then he frowned, almost doubting his own identification as he stared at the drab plains' sunset and the scenes of men and women in the

almost familiar urban surroundings. Dale seemed changed, the people thin and lackluster in spite of the garish new fashions. Then he realized his error and grunted in self-disgust. In twenty years, his mental picture had changed. He had even added beards and bulging muscles to the friends in his mind, conditioned by what he had grown to accept here.

Cala leafed through the pictures and tossed the book overboard before he could stop her. She opened the box and smelled its contents doubtfully.

"Food," Egon told her. "It's good food, very nourishing. Try it."

She obeyed at once as he reached for one of the lozenges he had remembered so long and longingly. For a moment, his childhood rushed back as it began dissolving on his tongue.

Cala gagged and spat, bending over to rinse her mouth with sea water. The box followed the pictures into the Atlantic.

Egon started to protest, then shrugged. Adults could never recapture the experience of childhood, it seemed. The lozenge was cloying with sweetness and too spicy. He sucked it a few seconds more, then let it fall into the sea. They drove on silently after the rafts.

It was early twilight when they reached the shore and the crescent moon was rising in the east. For a moment, sorrow for his old friend alone out there struck at Egon, but he forced it aside and began docking the dugout at the little shelter he and the last earthman had built. He

drew his bow and quivers from oiled leather cases and moved with Cala toward the woods that bordered the tiny beach here.

There was no sign of the rafts, of course.

They had been driven by paddles in unfamiliar hands, and the sea drift must have carried them almost a mile from his dock.

The wind was fragrant with the acrid scent of damp oak leaves and the fainter cleanness of maple as he found the old path that led to the other cove. They came on wild strawberries, and he stooped with Cala to gather a few, letting the musky, tempered sweetness dissolve on his tongue.

Somewhere an owl hooted, early awake and probably hungry. Further back in the hills there was a cough that could only be a cougar, moving with feline grace. He felt his own blood surge a bit, and his feet moved silently against the fragrant earth as he approached the path where deer sometimes came down to the little rivulet. The stranded colonists would have to be fed, he remembered, though that was no problem on Earth.

He was in luck. A young buck was drinking as Egon came up so quietly that the animal never startled. The bow tautened with life and then snapped forward resonantly as the arrow sped true and deep. The buck gave a single bound before Cala was on it, slitting its throat. Egon dressed it hastily and tossed the heavy load over his shoulder to resume his course at a steady trot, breathing evenly and deeply.

The men were camped where he had expected. There were perhaps a hundred in male dress and twice as many women, enough to start a new colony on some far world, and there was evidence in their foppish fashions to show that they all were from Dare.

They watched the woods with scared eyes, but there were no guards. No one spotted Egon and Cala against the trees. Most were slumped on the ground, and he heard their complaints over fatigue at the few hours of rowing and their desperation at being stranded without supplies. They seemed a hopeless lot, already giving up.

But a few, with some in uniform, had started a sickly fire and were obviously taking a tally of provisions. Egon headed for them, drawing startled cries from those who saw him. He walked past the outskirts, carrying the buck, to face a man in captain's jacket who was just getting to his feet.

"You'll need a better fire and some decent food," Egon told the man. "I've brought meat. Cala will show you how to cook it while I go back for another. But you can stop worrying about starving here."

The captain let his half-drawn weapon slide back and came closer, staring with a mixture of faint hope and disgust at the deer. "Where are we?" he asked. "And who are you?"

"This is Earth," Egon told him. And suddenly he smiled as he swept his eyes across the dark forest and toward the moon over the sea. "Earth. And I am the last earthman. Welcome home!"

END

THE FUR PEOPLE

by D. M. MELTON

Illustrated by GIUNTA

*This was what Mars was like
—tough, mean and deadly!*

I

The sand car rolled to a stop at the edge of the sand flat. Soberly, the driver looked out over the broad, bright expanse of sand. He had walked the deserts of Earth and had seen the deserts of Mercury, but he had never lost his feeling of wonder at these deserts which, but for these few midday hours, were deadly cold.

There was a flutter of movement

at his breast pocket and a flat, silky head popped out, peering up with bright, intelligent eyes. The man smiled.

"Thirsty, youngster?"

The youngster wriggled. It was a rock puppy, orphaned by someone's careless or callous heat blast the day before, high on the rim of the last deep. The man poured a few drops of water into the palm of his hand and the silky head nuzzled and drank. Then they both peered out at

the yellow expanse of sand. This flat could be crossed. He knew the way. But it would be reckless, and moss hunters are reckless only in their dealings with each other. Going around would mean two full days of stop-and-go, draining power and letting it build up again. Frowning, he lifted his mask. A moss hunter, long exposed to this thin air between the deeps, could do that and stay alert, for a few minutes.

The man scowled, checking power and oxygen. "The odds are long," he muttered finally. "Let's play it safe."

But he continued to stare, frowning thoughtfully, and finally he leaned back.

"On the other hand, Buster, I've a hunch we can make it. I might have to walk some, but you don't weigh much."

He pressed a thumb to the switch plate. The motor whined and the sand car lurched, its big, meter-wide balloons sloughing flabbily over the sand. The man relaxed, thinking of hot rum and low laughter at First Landing. Now and then he checked the dials. No power, now, even to the compressor which charged his oxygen flask. That could wait for richer air, in the low country. And he was almost warm. Sundown would bring cold—real cold. But now he was, for a moss hunter, almost comfortable. And his hunch they would make it without trouble was strong.

Presently he dozed, ignoring the chill that gradually seeped through his coverall. He used as little oxygen as would keep him

awake, as little in proportion as the orphan in his pocket was using from its own organically stored supply. So it was nearly an hour before he was certain that the figure ahead—the figure that wavered, rose and fell—was not just illusion but a man, a man walking and so doomed certainly to die.

He locked radar on the staggering figure. The silky head again popped out of his coverall pocket. The figure fell again and lay prone, and the front balloon had covered a booted foot when the radar cut the switch. He backed clear and propped the figure against the balloon. It was then that he saw it was not a man but a woman—hardly, by what he could see through her mask, more than a girl. And she was new to the deserts and the deeps. Hands and face were still unmarked by sand burns and dessication. And it would have taken a well grown woman with earth-gravity strength to have walked this far into the desert.

He fed her a dollop of oxygen, and her laboring lungs quieted. He shook his head at the pleading look after the first quick swallows of water.

"Later. We'll breathe deep and drink deep when we get to low ground."

The girl nodded, smiling weakly. "Up on the seat with you," he said. "I'll walk as much as I can and ride the step to rest. There'll be power to get us to low air."

Soon he lost track of time. Again and again he stumbled, slow to recover, and the car rolled on until the switch, keyed to his heart beat,

cut out. He would not set the controls to circle and return. Back on the step he would ride and rest, until the blurred reserve power dial, rocking toward the red, forced him to grip his mouthpiece and step off. He was staggering, nearly exhausted, when finally the sand car stopped again, this time with the panel beeping quietly and the radar winking "On Objective."

Their oxygen was nearly gone, but the power dials gave them a margin, slim, but a margin. He even cut in the heaters for a few costly seconds. The girl's head lifted and she opened her eyes. He saw anxiety in her look, but he pointed to a break in the rim where a clear path angled down deep into the canyon. The air thickened, and finally was rich and breathable.

They were too tired to talk. But the girl looked again and again back up the path. At the floor of the deep, thousands of feet below the rim, they came to a shelter, built around an as yet unfrozen spring.

"We made it," the man said tiredly. "Relax. We're all right now."

The girl was silent, but she had a cracked, painful smile for the rock puppies who watched, bright eyed, but soon scampered, chittering, out of the shelter, ducking their heads and rolling like ermine soccer balls out of sight into the rocks. The man lifted the baby from his pocket. It clung for a moment to his wrist and then it, too, tucked nose and feet out of sight and rolled away after the others. He punched the charge buttons to throw the full output of the car's pile into the power pack.



He handed the girl a tube of burn lotion and motioned to the spring.

"After you've washed off the sand," he said. "And we'll have some hot concentrate in a few minutes."

The girl took the tube, watching every move. The man shrugged irritably.

"For pete's sake, relax! We're out of it!"

Presently she returned, to lean back against the softness of the sand car balloon. Warm and thick, hot concentrates made them drowsy even as it built up their strength. Abruptly, it was dark.

II

At first light the man was rubbing his eyes, yawning, when a sharp "snick-click" brought him

fully alert. He looked up, straight into the black muzzle of an old issue automatic. The girl stood by the sand car, looking white and determined, but her hand was steady. He sat very still.

"All right," he said. "You do the talking."

"I need the sand car," she said.

"And this, of course, is out of sheer gratitude!"

The girl flushed. "I *am* grateful. But I have to go on, alone. So don't make me shoot."

He watched, speculating. He carried a lot of weapon for this gravity. Not many with Mars-muscles could handle an Earth weight heat gun with any speed. Reaction time would — probably — let him snap off a broad beam which could not miss and still roll aside before she fired.



14... 65

Her eyes were wide, frightened. "Don't make me shoot, please!" The "please" was only implied, but it was there. "I've already hurt one man, possibly killed him. I don't want to do it again."

"This is the same — just slower."

She shook her head. "You won't be alone here long."

Carefully he put his weapon on the ground, rolled clear and came to his feet. At her gesture he stepped back. His eyes went over her, head to boots. She wore a new coverall of some improved plastic, new type oxygen mask slung at her throat. There was no holster. The clips at her belt were obviously for tools.

"You're not a moss hunter," he said flatly. "And the only women hijackers I know of stay inside the domes. Who are you?"

"My name wouldn't mean anything to you. But I'm an archeologist."

"Not right now! Who are you running from?"

She flushed. "I'm not a thief. And I'm running from some of your friends. And from you. You all look alike."

"We all get that broiled look," he said wryly. "But we're not all alike."

She steadied the gun. "No! Why should you help me. Anyway, there are a dozen of them, so what could two of us do? Now will you fix that switch?"

He grinned. "So you've tried it!"

He was aware, vaguely, that the rock puppies were back — a growing, bright-eyed circle, watching silently. He pushed through them absently and they scampered aside,

to close in after him, curious as chipmunks. At the sand car he looked at the girl and measured the distance to the nearest cover. The rock puppies chattered, and one little one bounced to the seat of the car and then to his wrist. He shrugged, placed a thumb over the switch, turning a dial with the other hand. A hinged plate dropped. He took a key from his coverall and turned an inner lock.

"I'm the only one who could have done that. The panel would have flared and taken off your hand. But you can use it now."

He stepped away and the girl started the car down the path, the big balloons slapping on the loose shale. The rock puppies scampered and bounced after her. After a few yards she stopped and placed the man's gun and oxygen flask on a rock by the path.

"I'll leave the car at First Landing, if I get that far."

When she was gone he retrieved his weapon and waited. Presently the rock puppies returned, to roll into a brightly expectant circle around him.

"Bucket heads!" he grumbled at them. But they only wriggled and chattered, and presently he started flipping pebbles at them. They scampered and rolled, returning always to roll back the pebbles and reform their circle. He watched them absently. Except for men, and now, he thought wryly, women, they were the only warm-blooded life in the deeps. And unlike men, they harmed no one. Why was it, he wondered,

that no matter where you went, the fur people were, by and large, usually nicer than the skin people? And why couldn't these little guys, who harmed no one, be protected?

Territorial Government, he knew, talked of policing the deeps, to stop the hijacking and protect the puppies. But Pearsall said flatly it wasn't practical yet. It would take too many men, too much rocket-freighted material, both needed urgently elsewhere. So, for the foreseeable future, the Bureau would simply continue to buy moss, no questions asked, so long as the moss hunters took their credits and spent them with moderately good behavior at the domes before dropping back into the deeps.

So, but for the technicians and archeologists who worked the mines and the ruins in the high deserts, the moss hunters were still the only Marsmen.

The moss hunters had come early. When the first of the silvery ships had thundered in, the men at the screens saw only the rioting beauty of the deserts, hinted but not revealed by the photographs sent back years before when the probes drifted silently past. Then the men moved out from the ships and found the rainbow sands were deadly. It was a long time before they learned to live outside the ships and the first, primitive domes. But there was a way . . .

For slashed across the lands lay the pattern of the deeps — wide-flung gorges which within themselves, in places, contained deserts and mountains. And in the deepest sections, in the cuts of ancient

rivers and the coves of ancient lakes, the deeps held breathable air and springs of clear water.

So while the men fanning out from the domes found only ruins in the deserts, in the deeps they found life — green, clinging life — low-branched, leafy life — furry, scampering life. And with the clinging life they found the lichens, clinging here and there to the crimson rocks of the deeps.

The lichens brought the moss hunters. From them, purified but so far impossible to synthesize, came a substance which would lengthen the days of life. So, drawn by promise of gain or seeking a way and a place to hide, the moss hunters came and stayed and searched.

And from the beginning the search took on a strange and inexplicable pattern. For most found little. Yet some had luck in abundance and a few, luck which was phenomenal. No one knew why. The lucky ones shrugged. Playing hunches they said, and believed it. But the lucky ones had had to learn to hold what they found in any way they could. The deeps were without law, and there was, for the lucky and unlucky alike, small chance of return. Once committed to low gravity and no law, most of the moss hunters lived out their days in the deeps.

And that, the man reflected, was a lonely way of life. And even if a heat blast or the high deserts didn't get you, it was likely to be a short life. Men died in inexplicable falls and rock slides. And some just dis-

appeared. He, himself, he thought wryly, was on borrowed time. Lucky Hansen, they called him. But his luck couldn't hold forever.

He waited, flipping pebbles idly with the scampering rock puppies, and ruffling the fur of one youngster who clung, a chattering ball of silky fur, to his wrist. He grinned at them. He called them bucket heads, but they had the beaver's instinct for engineering. They couldn't move much uphill. But he had seen where they had moved fabulous weights down hill placed as precisely as a beaver fells a tree. He liked them. More than once, it seemed, they had brought him luck.

Presently the band scattered, and the little fellow at his wrist, whom he suspected was Buster, let go, tucked nose and feet out of sight, and bounced swiftly away. Soon the man, too, heard the crush of balloons on the path.

There were a dozen of them, moss hunters, bitter old pros with burned, wrinkled faces and dried out skins. They watched suspiciously, looking around for his equipment. A big man with a beefy face and wide shoulders hawked and spat and growled, "You alone?" The man nodded.

"Where's your sand bug?"

"Hijacked."

"Girl, with a baby face and Earth-side muscles?"

"She looked it. I didn't reach past her gun to see."

The wide-shouldered man snorted. "We've been trailing you. It doesn't figure. An old mossback picks her off the high ground but then lets her hijack him!"

The man smiled and shrugged. "So I'm a liar. You can say that, once. Maybe even twice. But I notice your friend there is nursing a broken arm, and by the looks of his throat I'll bet he took a judo chop."

The injured man grimaced, made a strangling sound, and dropped his good hand.

The big man turned. "I'll handle this," he grated. Then he turned back, looking the man over from head to boot. "I've seen you around the domes," he went on. "By your looks, you've been in and out of these deeps a long time. But you haven't let your belly sag from high living in low gravity. You just might be Bart Hansen."

The man nodded. "I might."

There was a stir, and someone guffawed. "Lucky Hansen! Waylaid! Probably the other way around, Spear, and he just sent her on the way. She's the kind could..."

Hansen smiled coldly, and his hand moved with unhurried certainty to his belt.

"I've been called a liar twice now."

It became very still. Spear scowled blackly. But presently he brought empty hands into sight.

"All right. All right. You're Hansen, and the lady stole your sand car."

There was little talk, although they all watched Hansen furtively as he sat unmoving by the shelter. Some took quick pulls at flasks of concentrate, but mostly they just rested. One, spotting an old rock puppy perched on a boulder across the path reached for a short-barreled

rifle. He found himself staring into the faintly glowing grid of Hansen's hand gun.

"Let him alone or you'll lose the rifle and maybe your hand!"

There was the start of an uproar. Spear squelched it, bellowing, "Dammit, there'll be time for target practice later! Waste of ammunition anyway. Let's go!"

Hansen put away his weapon. "Your trigger happy friend here has a new model car."

Spear nodded. "Out of the last shipment pushed up from Vandenberg. New type pile. More range."

"I could ride the step on that one. I'd like to get my own back."

Spear frowned.

"I won't slow you down. And I know the way."

Speculatively Spear nodded. "I hear you do. This a dead end deep?"

"It leads out, eventually, if you know the forks, to First Landing. It narrows considerably before the climb."

Spear rubbed his chin. "You're one of the lucky ones, Hansen. Maybe the luckiest of all. You could rub some of it off on us. The boys and I work together. We pool our moss, and we keep trespassers out of the deeps we work. It might be easier for you to join us than to buck us. Interested?"

Hansen surveyed the dozen hard faces.

"I'd have to think about it."

Spear waved expansively. "Do that. Aside from puppy popping and a few other such habits Squinty here isn't a bad guy. Ride the step with him and think on it."

For most of the day they traveled in silence. Here and there the trace of the girl's sand car showed. Hansen was relieved to see that at the only turn off where there could be real doubt as to her direction she had taken the proper fork. She was keeping ahead of them, but she was moving too fast for economy. Presently, Hansen nudged the man Squinty and motioned for him to pull up front, beside Spear.

"Spear," he asked, over the sloughing of the balloons. "Why do you want this girl? There are women at First Landing."

Spear laughed harshly, and Squinty snickered. "None like her!"

Then Spear's mouth hardened and he scowled. "You saw what she did to Squinty, here. And there wasn't any need for it!"

Hansen laughed. "I'll bet! And the poor, defenseless girl was so freshly one G she didn't know her own strength!"

Spear scowled and blustered. "Nobody, man or dame, makes a fool out of me or my boys. I look after my boys!"

Hansen's retort was cut short as a shot cracked thinly. Rock chips from a spot six inches from Spear's head showered into their faces. Spear swore and sprawled. Hansen laughed, but he, too, rolled like a rock puppy to a vantage point behind a rock. Another shot cracked and spattered as Spear crawled up beside him. Hansen grinned.

"Here's where you start looking after your boys again."

Spear only muttered, peering up the gorge. Hansen went on.

"There's my sand bug up ahead. Power pack is down, or she wouldn't have stopped. But I'll bet the water tank is dry, too, and my thermos is with her, full. She'll be up beyond that talus slope with nothing to lose by staying right there."

Spear glared at him. "She'll stay. Even with one G muscles she can't get far on foot. She knows that much by now, anyway."

Another shot cracked, and again Spear ducked and blinked. Hansen brushed dust from his eyes.

"She knows something else, too, Spear. How to use that old issue automatic of hers. In a steady hand they're more useful here than heat."

The others had all scattered to cover. Spear sat still, cursing and watching. He stared at Hansen's sand car, sitting apparently undamaged up the path.

"How do you know she's got water and food?"

"I don't. And I'm not about to walk over there and check. But a woman would have to be several cuts over average, mental and physical, to be sent up here for her kind of work. So she's smart and she's as strong as any two of us. And if she disappears, or you keep her here, there will be questions asked sooner or later. She isn't just another broken down crewman, hoping to get rich. Be sensible, man! Let her alone!"

Spear only cursed. Hansen watched and listened, knowing well the type. Pride and face were involved now. Hansen surveyed the rocky slope above.

"You're in for a siege, Spear. Want

me to see if I can talk her out of it?"

Spear grunted suspiciously, and shook his head. "I got a score to settle with that high-headed snob!"

"So what? If I try and get shot you're no worse off than now!"

Spear surveyed the talus slope, his face working with frustration. "We sure could rush her!" he muttered.

"You sure could. And she'd sure charge admission!"

Spear let out his breath. "All right. Try, if you're fool enough. She hasn't made you look any too bright, either. You talk her down from there and we'll work out something."

Hansen's heart pounded as he pushed back the hood of his cover-all. He called out, "Listen! I'm the man from the sand flat. I want to talk!" Then he spread empty hands and rose slowly to his feet. The first seconds would tell. But there was no shock from a hollow-point bullet, nor the "who-o-withhhh" of a near miss. She was willing to talk, or she was no longer there. He hoped she would talk. If she had run, little could be done. But he had the glimmer of a plan, a vague hunch forming out of nowhere in the back of his mind.

He moved slowly, his hands in sight. He thought he knew where she had chosen to hide. If he was right she had chosen well. He made for it, looking back now and then. Spear's crew was well hidden back down the path, but there was no way up except in the open, and no way around. He froze when a voice snapped, "Far enough!"

Hansen kept his voice low. "Could you use some help?"

"You still look just like the rest of them!"

"Of course I do! And in most ways, I am! But listen to me. Do you know Andrews, from the University of California? He dug last summer in the southern catacombs."

"Yes. I know him."

"Well, I took him there, and brought him back."

"You're Lucky Bart Hansen?"

"I'm Hansen, and I have to come in there with you, or go back to them, now!"

Her whisper barely reached him. "Come in, Mr. Hansen, please."

III

He scrambled up beside her. She had thrown back the hood of her overall and thick, dark hair hung to her shoulders. Her oval face was streaked with dirt, but it was a handsome face, and strong, with high cheek bones and a firm chin. Fear showed only in her eyes.

"Why didn't you tell me?"

"You held the gun and you were determined to run. Would you have listened?"

"No, I guess not. I was close to panic. I still am. This whole thing is insane. Things like this just don't happen. I feel like I was in the middle of a Tri-D Video thriller!"

Hansen sobered. "It's happening, all right, for real. But we'll find a way out."

He looked around. She had, indeed, chosen well. She had found a rock puppy arena, a play area, flat,

ringed with boulders. He could see where the larger ones had been rolled in from above, placed precisely. The narrow rollways between the boulders allowed a wide field of vision. The immaculate little beasts had cleared away dirt and rubble, leaving a clean, flat floor.

He smiled at her. "Nice place. Homey."

She smiled back; tautly at first. Then the smile spread and was lost in her eyes.

"I like it. Might spend the rest of my life in it. But the rock puppies moved out. They scolded at me for a while, when I was thinking things over. Then they scattered, all but that big fellow over there. He just watches me."

Then, thinly, Spear's coarse bellow drifted up to them.

"Hansen! She there?"

"She's here."

"Well? What's she have to say?"

"Says she likes it here. So do I."

There was an angry buzz of talk. Spear's bellow lifted above it.

"Heard a lot about you, Hansen. But I never heard it said you were stupid. I can't blame you for playing up that one. But we'll take you. Both of you!"

A shot spattered dust, and a heat ray glowed redly. Spear called again.

"You'll get thirsty, Hansen. And cold. Think on that!"

The girl's eyes were questioning. "He's right, isn't he? If they keep us here?"

Hansen nodded. "He's right. If they keep us here."

"But how can we get away. It's not possible."

"Maybe it is. If we're careful, and if we're lucky."

He was staring down the talus slope as if memorizing it. "There's a way, I think. But we'll have to wait until early morning, when some of these moons set. There's a new model car down there that will out distance any of the others."

"But . . ."

He waved her aside. "I've a hunch we can get it. Rest now. I'll watch."

The girl protested, but finally leaned back and relaxed. Darkness brought cold. Not killing cold, for there in the deep the air and rocks held some heat — or what passes for heat on Mars. Even so, Hansen found himself wishing he could roll up in a ball, like the rock puppies. He watched the sky. **Diemos** would not rise for another hour. **Phobos**, orbiting in less than eight, would plunge below the horizon in another thirty minutes. After a while he touched the girl's shoulder. She sat up tensely. "Are they coming?"

"No. They have to rest, too, remember. And they're sure of us. That's why the odds are in our favor. They're warm and comfortable, plugged into their car power packs. Now help me out of this coverall."

"You'll freeze!"

"Huh-up. I know to the minute how long I can function in light insulation. And I have to move quickly and quietly. Now hand me that knife."

The girl fumbled for the knife. Hansen looked up at the sky.

"Be dark soon, when Phobos dives. Now listen! This will take me twenty minutes or forever. If it's more than twenty minutes, you shoot whoever comes over this wall. It won't be me!"

Abruptly, it darkened. Hansen went over the wall and the girl whispered, "Be careful." There was only a soft rustle in the shale and then he was gone. She waited, anxiety growing, but there was no sound, no flash or glow of gun or heat. Time seemed to race by, and there were only two left of the twenty minutes when she heard his low whisper and he tumbled, panting, over the rim. She worked furiously to help him back into his coverall. She fed him a breath of oxygen.

"I'd give you brandy, but Spear's pets rifled my kit. That was a long — or a short-eighteen minutes, Bart Hansen. — I'm — I'm glad you're back!"

Hansen huddled, shivering. But his head was turned, listening.

"I'm glad, too. Now, get ready. There's a big sand car down there, in the clear. Squinty's. Remember it?"

"Yes."

"I'll follow you in my own bug, in a few minutes. Now, no matter what, you keep going. Radar will keep you on the path. Now go!"

The girl hesitated, shaking her head. Hansen snapped, "Dammit, get moving, before it gets any lighter. I know what I'm doing!"

"All right. But will that car run for me?"

Hansen put his knife back in his belt. "It'll run. The locks weren't



keyed to his heart beat. Only to his thumb."

The girl caught her breath, but she turned to the wall. Hansen all but pushed her over the rim. She clung to his hand for a moment. Then she was gone. Tensely, he listened. The sound of her descent faded. There was no other sound, no alarm from the sleeping men down the path. Then he heard a light rustling, which grew louder and nearer, and then her hoarse whisper reached him. "Hansen! It's me. Help me in."

Cursing solidly, he all but pulled her over the wall. "What's wrong with you. It'll be light in a few minutes. You're as stupid as the puppies!"

She sat limply, staring up at him. "I—I don't know what it is. But *something* is wrong. Something tells me not to go. It's—it's just a feeling I have. I don't understand..."

"Nuts! You panicked!"

"No! I'm scared. But I didn't panic. And—and you weren't going, were you? Your power pack isn't charged. I didn't set it up. So you were going to stay here in the middle of this crazy Tri-D show, holding off the bad guys! It won't do, Bart Hansen!"

Hansen crouched silently, listening. "Well," he said finally, "to tell you the truth, I'm scared too!"

For a long moment in the growing light they stared at each other. Then she touched his arm. "Do you feel it, too?"

He nodded.

"I'm not angry-scared," she went on, "like I am of those men down there. That I could live through if I had to. It would only make me sick. This is deep-scared, of something I don't understand."

Hansen sat beside her. It was nearly light, now, too late for either of them to run. He put an arm around her. Even through the heavy

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coverall he could feel her shivering with cold.

"I don't understand it, either. I've had hunches, strong hunches. But, this is — is compelling. We're not under control. I'm sure of that. But we're being told, somehow, to stay here!"

The light grew stronger. Hansen looked to his gun and charge clips. One thing was sure, he thought sardonically. If Spear's crew did try to rush them, as well they might if they lost their heads when they found Squinty, they would turn this thing into a regular scalp-tingler of a Vid show! He started, raising his gun, at a rustling sound on the slope. But it was only a rock puppy rolling in along the top of the talus. It bounced in through one of the rollways, unfolding itself and sitting up, bright eyed, chittering musical play-noises. In spite of himself, Hansen laughed. "Look, bucket head. We've no time to play. Roll! You're liable to get hurt."

The puppy only wriggled, and rolled over by the girl to peer out down the slope. There was a shout from the rocks below.

"They've found Squinty," Hansen muttered.

There was another shout, and a shot, and a blind, prolonged play of heat from someone angry enough to risk burning up his projector.

Then, as they ducked away from the open rollways, they heard a faint rumble, and then the growing crash of rolling rocks. Hansen tensed, his eyes darting around. "Rock slide," he muttered. "Both sides of us and across! But what started it?"

Abruptly the rumble grew to a roar. There was one piercing cry from the gorge below them. Then all sound was drowned and sight blanked by a roiling cloud of reddish dust. They stared, unbelieving, as the sound died away and the dust slowly thinned and settled. A section of the rocky path below was filled now with rock and rubble. The two slides, starting simultaneously on each side, had covered Spear's precise area, no more. Out in front, untouched, were the two sand cars, Hansen's where the girl had abandoned it, and Squinty's, where Hansen had, an hour before, pushed it.

The girl whispered, "That — that didn't just happen, Bart! It — it was planned!"

Hansen stood dazed, like a man in shock. He turned to stare at the little rock puppy which still sat, unmoving, looking out the rollway. Others were appearing now, from beside them and from across the gorge. One little fellow rolled up and bounced into the girl's arms and clung tightly to her wrist. Hansen shook his head and leaned limply against the wall.

"It's hard to believe," he said finally. "Hunches! The rock puppies! Some of us were lucky, some unlucky. And some just disappeared, like Spear!"

He turned to the girl, and the little fellow who was burrowing his way into the breast pocket of her coverall. "Maybe," he mused, "that's why against all logic I took that short cut where I found you."

At the foot of the hill, when they were ready to start, the girl turned

suddenly to Hansen. "Is it true that Territorial Government thinks it's too soon to start policing the deeps?"

Hansen looked startled. "Where did you hear that?"

She shrugged. "Gossip, I suppose. But it's true, isn't it?"

"It's true. Pearsall say he hasn't the men, or the material."

"Well, if he would just come out and get acquainted with the rock puppies, I'll bet he'd change his mind."

Hansen looked around at the circle of silky faces peering up at him and for the first time since the rock slide he laughed. "You know, I think he might. But he won't leave the domes. Says he hasn't the time."

"But if we took Buster, here, with us when we talked with him..."

Hansen laughed again. "OK, Buster. You're the ambassador."

At midafternoon Hansen stopped at a fork. He pointed. "This is the turn-off, but down there a mile is a shelter, a good one. Built it myself. We could stay there tonight,

get some rest, and recharge these packs. Would you like that?"

The girl met his eyes. Her lips parted and she looked quickly away. Her voice was carefully casual. "Why—yes. That would be nice."

Then she straightened in her seat, blushing. "No!" she said indignantly. "Of all the..." But, of a sudden, her words were lost in her own laughter. Hansen laughed too, and they both looked accusingly at the flat, silky head which had popped out of her breast pocket. Buster peered from one to the other and wriggled happily. The girl choked off her laughter.

"This one," she said positively, "is definitely not a baby!"

Ruefully, Hansen sighed. "We might as well go on then."

The girl's lip pushed out stubbornly. But she ruffled the flat, silky head and her lips quirked at the corners.

"Some things," she said firmly, "a girl wants to decide for herself!"

END

In the July Worlds of Tomorrow —

He tried to cure the world of all

its ills — and nearly killed it!

OF GODLIKE POWER

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IN OUR BLOCK

by R. A. LAFFERTY

*They were new people in town
— or new something, anyway!*

There were a lot of funny people in that block.

"You ever walk down that street?" Art Slick asked Jim Boomer, who had just come onto him there.

"Not since I was a boy. After the overall factory burned down, there was a faith healer had his tent pitched there one summer. The street's just one block long and it deadends on the railroad embankment. Nothing but a bunch of shanties and weed-filled lots. The shanties looked different today, though, and there seem to be more of them.

I thought they pulled them all down a few months ago."

"Jim, I've been watching that first little building for two hours. There was a tractor-truck there this morning with a forty foot trailer, and it loaded out of that little shanty. Cartons about eight inches by eight inches by three foot came down that chute. They weighed about thirty-five pounds each from the way the men handled them. Jim, they filled that trailer up with them, and then pulled it off."

"What's wrong with that, Art?"

"Jim, I said they filled that trailer up. From the drag on it it had about a sixty thousand pound load when it pulled out. They loaded a carton every three and a half seconds for two hours; that's two thousand cartons."

"Sure, lots of trailers run over the load limit now days. They don't enforce it very well."

"Jim, that shack's no more than a cracker box seven feet on a side. Half of it is taken up by a door, and inside is a man in a chair behind a small table. You couldn't get anything else in that half. The other half is taken up by whatever that chute comes out of. You could pack six of those little shacks on that trailer."

"Let's measure it," Jim Boomer said. "Maybe it's bigger than it looks." The shack had a sign on it: *Make Sell Ship Anything Cut Price*. Jim Boomer measured the building with an old steel tape. The shack was a seven foot cube, and there were no hidden places. It was set up on a few piers of broken bricks, and you could see under it.

"Sell you a new fifty-foot steel tape for a dollar," said the man in the chair in the little shack. "Throw that old one away." The man pulled a steel tape out of a drawer of his table-desk, though Art Slick was sure it had been a plain flat-top table with no place for a drawer.

"Fully retractable, rhodium plated, Dort glide, Ramsey swivel, and it forms its own carrying case. One dollar," the man said.

Jim Boomer paid him a dollar for it. "How many of them you got?"

"I can have a hundred thousand ready to load out in ten minutes," the man said. "Eighty-eight cents each in hundred thousand lots."

"Was that a trailer-load of steel tapes you shipped out this morning?" Art asked the man.

"No, that must have been something else. This is the first steel tape I ever made. Just got the idea when I saw you measuring my shack with that old beat-up one."

Art Slick and Jim Boomer went to the run-down building next door. It was smaller, about a six foot cube, and the sign said *Public Stenographer*. The clatter of a typewriter was coming from it, but the noise stopped when they opened the door.

A dark, pretty girl was sitting in a chair before a small table. There was nothing else in the room, and no typewriter.

"I thought I heard a typewriter in here," Art said.

"Oh, that is me," the girl smiled. "Sometimes I amuse myself make typewriter noises like a public stenographer is supposed to."

"What would you do if someone came in to have some typing done?"

"What are you think? I do it of course."

"Could you type a letter for me?"

"Sure is can, man friend, two bits a page, good work, carbon copy, envelope and stamp."

"Ah, let's see how you do it. I will dictate to you while you type."

"You dictate first. Then I write. No sense mix up two things at one time."

Art dictated a long and involved letter that he had been meaning to write for several days. He felt like a fool droning it to the girl as she filed her nails. "Why is public stenographer always sit filing her nails?" she asked as Art droned. "But I try to do it right, file them down, grow them out again, then file them down some more. Been doing it all morning. It seems silly."

"Ah — that is all," Art said when he had finished dictating.

"Not P.S. Love and Kisses?" the girl asked.

"Hardly. It's a business letter to a person I barely know."

"I always say P.S. Love and Kisses to persons I barely know," the girl said. "Your letter will make three pages, six bits. Please you both step outside about ten seconds and I write it. Can't do it when you watch." She pushed them out and closed the door.

Then there was silence.

"What are you doing in there, girl?" Art called.

"Want I sell you a memory course too? You forget already? I type a letter," the girl called.

"But I don't hear a typewriter going."

"What is? You want verisimilitude too? I should charge extra." There was a giggle, and then the sound of very rapid typing for about five seconds.

The girl opened the door and handed Art the three page letter. It was typed perfect, of course.

"There is something a little odd about this," Art said.

"Oh? The ungrammar of the letter is your own, sir. Should I have correct?"

"No. It is something else. Tell me the truth, girl, how does the man next door ship out trailer-loads of material from a building ten times too small to hold the stuff?"

"He cuts prices."

"Well, what are you people? The man next door resembles you."

"My brother-uncle. We tell every body we are Innominee Indians."

"There is no such tribe," Jim Boomer said flatly.

"Is there not? Then we will have to tell people we are something else. You got to admit it sounds like Indian. What's the best Indian to be?"

"Shawnee," said Jim Boomer.

"O.K. then we be Shawnee Indians. See how easy it is."

"We're already taken," Boomer said. "I'm a Shawnee and I know every Shawnee in town."

"Hi cousin!" the girl cried, and winked. "That's from a joke I learn, only the begin was different. See how foxy I turn all your questions."

"I have two-bits coming out of my dollar," Art said.

"I know," the girl said. "I forgot for a minute what design is on the back of the two-bitser piece, so I stall while I remember it. Yes, the funny bird standing on the bundle of fire wood. One moment till I finish it. Here." She handed the quarter to Art Slick. "And you tell everybody there's a smoothie public stenographer here who types letters good."

"Without a typewriter," said Art Slick. "Let's go, Jim."

"P.S. Love and Kisses," the girl called after them.

The Cool Man Club was next door, a small and shabby beer bar. The bar girl could have been a sister of the public stenographer.

"We'd like a couple of Buds, but you don't seem to have a stock of anything," Art said.

"Who needs stock?" the girl asked. "Here is beers." Art would have believed that she brought them out of her sleeves, but she had no sleeves. The beers were cold and good.

"Girl, do you know how the fellow on the corner can ship a whole trailer-load of material out of a space that wouldn't hold a tenth of it?" Art asked the girl.

"Sure. He makes it and loads it out at the same time. That way it doesn't take up space, like if he made it before time."

"But he has to make it out of something," Jim Boomer cut in.

"No, no," the girl said. "I study your language. I know words. Out of something is to assemble, not to make. He makes."

"This is funny," Slick gaped. "Budweiser is misspelled on this bottle, the i before the e."

"Oh, I goof," the bar girl said. "I couldn't remember which way it goes so I make it one way on one bottle and the other way on the other. Yesterday a man ordered a bottle of Progress beer, and I spelled it Progers on the bottle. Sometimes I get things wrong. Here, I fix yours."

She ran her hand over the label, and then it was spelled correctly.

"But that thing is engraved and then reproduced," Slick protested.

"Oh, sure, all fancy stuff like that," the girl said. "I got to be more careful. One time I forget and make Jax-taste beer in a Schlitz bottle and the man didn't like it. I had to swish swish change the taste while I pretended to give him a different bottle. One time I forgot and produced a green-bottle beer in a brown bottle. 'It is the light in here, it just makes it look brown,' I told the man. Hell, we don't even have a light in here. I go swish fast and make the bottle green. It's hard to keep from making mistake when you're stupid."

"No, you don't have a light or a window in here, and it's light," Slick said. "You don't have refrigeration. There are no power-lines to any of the shanties in this block. How do you keep the beer cold?"

"Yes, is the beer not nice and cold? Notice how tricky I evade your question. Will you good men have two more beers?"

"Yes, we will. And I'm interested in seeing where you will get them," Slick said.

"Oh look, is snakes behind you!" the girl cried.

"Oh how you startle and jump!" she laughed. "It's all joke. Do you think I will have snakes in my nice bar?"

But she had produced two more beers, and the place was as bare as before.

"How long have you tumble-bugs been in this block?" Boomer asked.

"Who keep track?" the girl said. "People come and go."

"You're not from around here,"

Slick said. "You're not from anywhere I know. Where do you come from? Jupiter?"

"Who wants Jupiter?" the girl seemed indignant. "Do business with a bunch of insects there is all! Freeze your tail too."

"You wouldn't be a kidder, would you girl?" Slick asked.

"I sure do try hard. I learn a lot of jokes but I tell them all wrong yet. I get better, though. I try to be the witty bar girl so people will come back."

"What's in the shanty next door towards the tracks?"

"My cousin-sister," said the girl. "She set up shop just today. She grow any color hair on bald-headed men. I tell her she's crazy. No business. If they wanted hair they wouldn't be bald-headed in the first place."

"Well, *can* she grow hair on bald-headed men?" Slick asked.

"Oh sure. Can't you?"

There were three or four more shanty shops in the block. It didn't seem that there had been that many when the men went into the Cool Man Club.

"I don't remember seeing this shack a few minutes ago," Boomer said to the man standing in front of the last shanty on the line.

"Oh, I just made it," the man said

Weathered boards, rusty nails . . . and he had just made it.

"Why didn't you — ah — make a decent building while you were at it?" Slick asked.

"This is more inconspicuous," the man said. "Who notices when an *old*

building appears suddenly? We're new here and want to feel our way in before we attract attention. Now I'm trying to figure out what to make. Do you think there is a market for a luxury automobile to sell for a hundred dollars? I suspect I would have to respect the local religious feeling when I make them, though."

"What is that?" Slick asked.

"Ancestor worship. The old gas tank and fuel system still carried as vestiges after natural power is available. Oh, well, I'll put them in. I'll have one done in about three minutes if you want to wait."

"No. I already got a car," Slick said. "Let's go, Jim."

That was the last shanty in the block, so they turned back.

"I just got to wondering what was down in this block where nobody ever goes," Slick said. "There's a lot of odd corners in our town if you look them out."

"There were some queer guys in the row of shanties that were here before this bunch," Boomer said. "Some of them used to come up to the Red Rooster to drink. One of them could gobble like a turkey. One of them could roll one eye in one direction and the other eye the other way. They shoveled hulls at the cotton-seed oil float before it burned down."

They went by the public stenographer shack again.

"No kidding, honey, how do you type without a typewriter?" Slick asked.

"Typewriter is too slow," the girl said.

"I asked How, not Why," Slick said.

"I know. Is it not nifty the way I turn away a phrase? I think I will have a big oak tree growing in front of my shop tomorrow for shade. Either of you nice men have an acorn in your pocket?"

"Ah — no. How do you really do the typing, girl?"

"You promise you won't tell anybody."

"I promise."

"I make the marks with my tongue," the girl said.

They started slowly on up the block.

"Hey, how do you make the carbon copies?" Jim Boomer called back.

"With my other tongue," the girl said.

There was another forty-foot trailer loading out of the first shanty in the block. It was bundles of half-inch plumbers' pipe coming out of the chute — in twenty foot lengths. Twenty foot rigid pipe out of a seven foot shed.

"I wonder how he can sell trailer-loads of such stuff out of a little shack like that," Slick puzzled, still not satisfied.

"Like the girl says, he cuts prices," Boomer said. "Let's go over to the Red Rooster and see if there's anything going on. There always were a lot of funny people in that block."

END

Next Month in If . . .

We'll try real hard to find room for some of the letters that have been piling up — but this month, with a hefty chunk of *Skylark DuQuesne* and the big Van Vogt-Schmitz novella to fit in, there just wasn't room.

Apart from that —

Retief's back. That's good news in itself, and also good news is the fact that he's got the August cover with a lovely Retief-like painting by Jack Gaughan. The title of this new saga of interstellar diplomacy is *Trick or Treaty*. We thought of holding it till our October issue, to fit the title to the season . . . but Keith Laumer doesn't need the help of the calendar. *Trick or Treaty* supplies its own Hallowe'en prankishness . . .

Incidentally, if you come across a paperbound book by Keith Laumer called *Embassy* we think you'll enjoy it. It isn't science fiction; but it is, as Keith admits in a note on the flyleaf of our copy, the adventures of Retief's real-life equivalent in a Southeast Asian country that seemed to us a lot like Vietnam. One of the reasons the Retief stories are as good as they are is that Laumer was in fact attached to our diplomatic service for some years — and there's real fantasy for you!

SKYLARK DuQUESNE

by EDWARD E. SMITH, Ph.D.

Illustrated by MORROW

*Richard Seaton could not forgive
— DuQuesne could not forget —
yet the two of them were allies!*

VIII

Industrial Revolution

When Seaton and Crane had begun to supply the Earth with ridiculously cheap power, they had expected an economic boom and a significant improvement in the standard of living. Neither of

them had any idea, however, of the effect upon the world's economy that their space-flights would have; but many tycoons of industry did.

They were shrewd operators, those tycoons. As one man they licked their chops at the idea of interstellar passages made in days. They gloated over thoughts of the multifold increase in productive capacity that

What Has Gone Before —

The most deadly rivals in the universe are Richard Seaton and Marc C. DuQuesne. For more than a year Seaton has written DuQuesne off as no longer a threat, since in a titanic battle DuQuesne was disembodied and, in the form of a pure mentality, placed in a time stasis which is expected to last unchanged for countless billions of years. But as our story opens a group of Norlaminian scientists have just discovered that there is a flaw in the mathematics and DuQuesne will be free at any moment.

Seaton and the Norlaminians resolve to send out a thought message which will alert all human races throughout the universe to the danger — and to the need for all persons of good will to band together.

Meanwhile DuQuesne in fact is freed and, through the workings of certain other disembodied intelligences, is reincarnated in his own body, in a spaceship countless parsecs away from Earth. He is attacked without warning by unknown forces. He manages to get away, but realizes he cannot survive another attack — and that the mere fact of his existence, means that the unknown enemy will sooner or later hunt him down.

There is only one thing to do. Marc DuQuesne builds a powerful transmitter and transmits a call for help — to Richard Seaton, his deadliest enemy!

would have to be made so soon; as soon as commerce was opened up with dozens and then with hundreds of Tellus-type worlds, inhabited by human beings as human as those of Earth. And when they envisioned hundreds and hundreds of uninhabited Tellus-type worlds, each begging to be grabbed and exploited by whoever got to it first with enough stuff to hold it and to develop it . . . they positively drooled.

These men did not think of money as money, but as their most effective and most important tool: a tool to be used as knowledgeably as the old-time lumberjack used his axe.

Thus, Earth was going through convulsions of change more revolutionary by far than any it had experienced throughout all previous history. All those pressures building

up at once had blown the lid completely off. Seaton and Crane and their associates had been working fifteen hours a day for months training people in previously unimagined skills; trying to keep the literally exploding economy from degenerating into complete chaos.

They could not have done it alone, of course. In fact, it was all that a thousand Norlaminian "Observers" could do to keep the situation even approximately in hand. And even the Congress—*mirabile dictu!*—welcomed those aliens with open arms; for it was so hopelessly deadlocked in trying to work out any workable or enforceable laws that it was accomplishing nothing at all.

All steel mills were working at one hundred ten per cent of capa-

city. So were almost all other kinds of plants. Machine tools were in such demand that no estimated time of delivery could be obtained. Ar-nak, dagal, and inoson, those wonder-materials of the construction industry, would be in general supply some day; but that day would not be allowed to come until the change-over could be made without disrupting the entire economy. Inoson especially was confined to the spaceship builders; and, while every pretense was being made that production was being increased as fast as possible, the demand for spaceships was so insatiable that every hulk that could leave atmosphere was out in deep space.

Multi-billion-dollar corporations were springing up all over Earth. Each sought out and began to develop a Tellus-type planet of its own, to bring up as a civilized planet or merely to exploit as it saw fit. Each was clamoring for—and using every possible artifice of persuasion, lobbying, horse-trading, and out-and-out bribery and corruption to obtain—spaceships, personnel, machinery light and heavy, office equipment, and supplies. All the employables of Earth, and many theretofore considered unemployable, were at work.

Earth was a celestial madhouse

...

It is no wonder, then, that Seaton and Crane were haggard and worn when they had to turn their jobs over to two upper-bracket Norlaminians and leave Earth.

Their situation thereafter was not much better.

The first steps were easy—anyway, the decisions involved were easy; the actual work involved was roughly equivalent to the energy budget of several Sol-type suns. It is an enormous project to set up a line of defense hundreds of thousands of miles long; especially when the setters-up do not know exactly what to expect in the way of attack. They knew, in fact, only one thing: that the Norlaminians had made a probabilistic statement that Marc C. DuQuesne was likely to be present among them before long.

That was excuse, reason and compulsion enough to demand the largest and most protracted effort they could make. The mere preliminaries involved laying out axes of action that embraced many solar systems, locating and developing sources of materials and energies that were enough to smother a hundred suns. As that work began to shape up, Seaton and Crane came face to face with the secondary line of problems . . . and at that point Seaton suddenly smote himself on the forehead and cried: "Dunark!"

Crane looked up. "Dunark? Why, yes, Dick. Quite right. Not only is he probably the universe's greatest strategist, but he knows the enemy almost as well as you and I do."

"And besides," Seaton added, "he doesn't think like us. Not at all. And that's what we want; so I'll call him now and we'll compute a rendezvous."

Wherefore, a few days later, Dunark's Osnomian cruiser matched velocities with the hurtling worldlet and began to negotiate its locks.



GARY MCRAE

Seaton shoved up the *Valeron's* air-pressure, cut down its gravity, and reached for the master thermostat.

"Not too hot, Dick," Dorothy said. "Light gravity is all right, but make them wear some clothes any time they're outside their special quarters. I simply *won't* run around naked in my own house. And I won't have them doing it, either."

Seaton laughed. "The usual eighty-three degrees and twenty-five per cent humidity. They'll wear clothes, all right. She'll be tickled to death to wear that fur coat you gave her—she doesn't get a chance to, very often—and we can stand it easily enough," and the four Tellurians went out to the dock to greet their green-skinned friends of old: Crown Prince Dunark and Crown Princess Sitar of Osnome, one of the planets of the enormous central sun of the Central System.

Warlike, bloodthirsty, supremely able Dunark; and Sitar, his lovely, vivacious — and equally warlike — wife. He was wearing ski-pants (Osnome's temperature, at every point on its surface and during every minute of every day of the year, is one hundred degrees Fahrenheit), a heavy sweater, wool socks, and fur-lined moccasins. She wore a sweater and slacks under her usual fantastic array of Osnomian jewelry; and over it, as Seaton had predicted, the full-length mink coat. Each was wearing only one Osnomian machine-pistol instead of the arsenal that had been their customary garb such a short time before.

The three men greeted each other warmly and executed a six-hand

handshake; the while the two white women and the green one went into an arms-wrapped group; each talking two hundred words to the minute.

A couple of days later, the Norlaminian task-force arrived and a council of war was held that lasted for one full working day. Then, the defense planned in length and in depth, construction began: Seaton and Crane sat in the two master-control helmets of the Brain. Rovol worked with the brain of the Norlaminian spaceship. Dozens of other operators, men and women, worked at and with other, less powerful devices.

On the surface of a nearby planet, ten thousand square miles of land were leveled and paved to form the Area of Work. Stacks and piles and rows and assortments of hundreds of kinds of structural members appeared as though by magic. Gigantic beams of force, made visible by a thin and dusty pseudo-mist, flashed here and there; seizing this member and that and these and them and those and joining them together with fantastic speed to form enormous towers and platforms and telescope-like things and dirigible tubes and projectors.

Some of these projectors took containers of pure force out to white dwarf stars after neutronium. Others took *faidons*—those indestructible jewels that are the *sine qua non* of higher-order operation—out to the cores of stars to be worked into lenses of various shapes and sizes. Out into the environment of scores of

millions of degrees of temperature and of scores of millions of tons per square inch of pressure that is the only environment in which the faidon can be worked by any force known to the science of man.

The base-line, which was to be built of enormous, absolutely rigid beams of force, could not be of planetary, or even of orbital dimensions. It had to extend, a precisely measured length, from the core of a star to that of another, having as nearly as possible the same proper motion, over a hundred parsecs away. Thus it took over a week to build and to calibrate that base-line; but, once that was done, the work went fast.

The most probable lines of approach were blocked by fourth-, fifth-, and sixth-order installations of tremendous range and of planetary power: less probable ones by defenses of somewhat lesser might; supersensitive detector webs fanned out everywhere. And this work, which would have required years a short time before, was only a matter of a couple of weeks for the gigantic constructor-projectors now filling the entire Area of Work.

When everything that anyone could think of doing had been done, Seaton lit his pipe, jammed both hands into his pockets, and turned to his wife. "Well, we've got it made—now what are we going to do with it? Sit on our hands until Blackie Duquesne trips a trigger or some Good Samaritan answers our call? I'd give three nickels to know whether he's loose yet or not, and if he is loose, just where he is at this moment."

"I'd raise you a dime," she said; and then, since Dorothy Seaton concealed an extremely useful brain under her red curls, she added slowly, "And maybe . . . you know what the Norlaminians deduced: that, upon liberation, he'd be rematerialized? That he'd have a very good spaceship. That, before attacking us, he would recruit personnel, both men and women, both from need of their help and from loneliness . . . wait up—loneliness! Who—a girl, probably—would he get loneliest for?"

Seaton snapped his fingers. "I can make an awfully good guess. Hunkie de Marigny."

"Hunkie de Who? Oh, I remember. That big moose with the black hair and the shape."

Seaton laughed. "Funny, isn't it, that such an accurate description can be so misleading? But my guess is, if he's back she knows it . . . I think it'd be smart to flip myself over to the Bureau and see what I can find out. Want to come along?"

"Uh-uh; she isn't my dish of tea."

Seaton projected his solid-seeming simulacrum of pure force to distant Tellus, to Washington, and to the sidewalk in front of the Bureau. He mounted the steps, entered the building, said "Hi, Gorgeous" to the shapely blonde receptionist, and took an elevator to the sixteenth floor; where he paused briefly in thought.

He hadn't better see Hunkie first, or only: Ferdinand Scott, the world's worst gossip, would talk about it, and Hunkie would draw her own conclusions. He'd pull Scotty's teeth first.

Wherefore he turned into the laboratory beside the one that once had been his own. "Hi, Scotty," he said, holding out his hand, "Don't tell me they've actually got you *working* for a change."

Scott, a chunky youth with straw-colored hair that needed cutting, jumped off of his stool and shook hands vigorously. "Hi, Dickie, old top! Alla time work. 'Slavey' Scott; that's me. But boy oh boy, *did* I goof on that 'Nobody Holme' bit! You and that bottle of waste solution, that you stirred the whole world up with like goulash! Why can't anything like that ever happen to me? But I s'pose I'd've blown the whole world to hellangone up instead of just putting it into the God-awful shape it's in now, like you and Blackie DuQuesne did. *Wow*, what a mess!"

"Yeah. Speaking of DuQuesne — seen him lately?"

"Not since the big bust. The Norlaminians probably know all about him."

"They don't. I asked. They lost him."

"Well, you might ask Hunkie de Marigny. She'll know if anybody does."

"Oh—she still here?"

"Yeah. Most of us are, and will be."

Seaton chatted for another minute, then, "Take it easy, guy," he said; and went up the corridor to Room 1631. The door was wide open, so he went in without knocking.

"Park it. Be with you in a moment," a smooth contralto voice said, and Seaton sat down on a chair near the door.

The woman—Doctor Stephanie de Marigny, nuclear physicist and good at her trade—kept both eyes fastened on a four-needle meter about eighteen inches in front of her nose. Her well-kept hands and red-nailed fingers, working blind with the sure precision of those of a world-champion typist, opened and closed switches, moved sliders and levers, and manipulated a dozen or so vernier knobs in tiny arcs.

There was nothing to show any uninformed observer what she was doing. Whatever it was that she was working on could have been behind that instrument-filled panel—or down in some sub-basement—or at the Proving Grounds down the Potomac—or a million miles or parsecs out in space. Whatever it was or wherever, as she worked the four needles of the master-meter moved closer and closer together as each needle approached the center-zero mark of the meter's scale —

Until finally the four hair-thin flat needles were exactly in line with each other and with the hair-thin zero mark. Whereupon four heavy plungers drove home and every light on the panel flashed green and went out.

"*On* the button," she said then, aloud. She rose to her feet, stretched as gracefully and luxuriously and unselfconsciously as does a cat, and turned toward her visitor.

"Hi, Hunkie," Seaton said. "Can you spare me a minute?"

"Nice to see you again, Dick." She came toward him, hand outstretched. "I could probably be talked into making it two minutes."

The word "big", while true, was both inadequate and misleading. Stephanie de Marigny was tall—five feet ten in her nylons—and looked even taller because of her three-inch heels, her erect posture, and because of the mass of jet-black hair piled high on her head.

Her breasts jutted; her abdomen was flat and hard; her wide, flat hips flared out from a startlingly narrow waist; and her legs would have made any professional glamour-photographer drool. And her face, if not as beautiful as her body, was fully as striking. Her unplucked eyebrows, as black as her hair, were too long and too thick and too bushy and grew too nearly together above a nose that was as much of a beak as DuQuesne's own. The lashes over her deep brown eyes were simply incredible. Her cheekbones were too large and too prominent. Her fire-engine-red mouth was too big. Her square chin and her hard, clean line of jaw were too outstanding; demanded too much notice. Her warm, friendly, dimple-displaying smile, however, revealed the charm that was actually hers.

Seaton said, "As always, you're really a treat for the optic nerve."

She ignored the compliment. "You aren't; you look like a catastrophe looking for a place to happen. You ought to take better care of yourself, Dick. Get some sleep once in a while."

"I'm going to, as soon as I can. But what I came in for—have you heard anything of Blackie lately?"

"No. Not since he got delusions of grandeur. Why? Should I have?"

"Not that I know of. I just thought

maybe you two had enough of a thing on so you'd keep in touch."

"Uh-uh. I ran around with him a little, is all. Nothing serious. Of all the men I know who understand and appreciate good music, he's the youngest, the best-looking, and the most fun. Also the biggest. I can wear high heels and not tower over him, which I can't do with most men . . ." She paused, nibbling at her lower lip, then went on, "My best guess is that he's out on one of the new planets somewhere, making several hundred thousand tax-free dollars per year. That's what I'm going to be doing as soon as I finish Observers' School here."

"You're the gal who can do it, too. Luck, Hunkie."

"Same to you, Dick. Drop in again, any time you're around."

And aboard the *Skylark of Valeron*, Seaton turned to Dorothy with a scowl. "Nobody's seen him or heard anything of him, so he probably isn't loose yet. I hate this waiting. Confound it, I wish the big black ape would get loose and start something!"

Although Seaton did not know it, DuQuesne had, and was about to.

It happened that night, after Seaton had gone to bed.

The message came in loud and clear on Seaton's private all-hours receiver, monitored and directed by the unsleeping Brain:

". . . Seaton reply on tight beam of the sixth stop DuQuesne calling Seaton reply on tight beam of the sixth stop DuQuesne calling . . ."

Coming instantly awake at the sound of his name, Seaton kicked

off the covers, thought a light on, and, setting hands and feet, made a gymnast's twisting, turning leap over Dorothy without touching her. There was plenty of room on his own side of the bed, but the direct route was quicker. He landed on his feet, took two quick steps, and slapped the remote-control helmet on his head.

"Trace this call. Hit its source with a tight beam of the sixth," he thought into the helmet; then took it off and said aloud, "You're coming in loud and clear. What gives?"

"Loud and clear here. All hell's out for noon. I just met the damndest alien any science-fiction fan ever imagined—teeth, wings, tail—the works. Klazmon by name; boss of two hundred forty-one planets full of monsters just like him. He's decided that all humanity everywhere should be liquidated; and it looks as though he may have enough stuff to do just that."

Dorothy had sat up in bed, sleepily. She made a gorgeously beautiful picture. Seaton thought; wearing a wisp of practically nothing and her hair a tousled auburn riot. As the sense of DuQuesne's words struck home, however, a look of horror spread over her face and she started to say something; but Seaton touched his lips with a forefinger and she, wide awake now, nodded.

"Nice summary, DuQuesne," Seaton said then. "Now break it down into smaller pieces, huh?" and DuQuesne went on to give a verbatim report of his interview with Llanzlan Klazmon of the Realm of the Llundri.

"So much for facts," DuQuesne said. "Now for inferences and deduc-

tions. You know how, when you're thinking with anyone, other information, more or less relevant and more or less clear, comes along? A sort of side-band effect?"

"Yeah, always. I can see how you picked up the business about the stranger ships that way. But how sure are you that those seventeen ships were *Fenachrone*?"

"Positive. That thought was clear. And for that matter, there must be others running around loose somewhere. How possible is it, do you think, to wipe out completely a race that has had spaceships as long as they have?"

"Could be," agreed Seaton. "And this ape Klazmon figured it that we were the same race, basically, both mentally—savage, egocentric, homicidal—and physically. How could he arrive at any such bobbled-up, cock-eyed conclusions as that?"

"For him, easily enough. Klazmon is just about as much like us as we are like those X-planet cockroaches. Imagine a man-sized bat, with a super-able tail, cat's eyes and teeth, humanoid arms and hands, a breastbone like the prow of a battleship, pectoral muscles the size of forty-pound hams, and —"

"Wait up a sec—this size thing. His projection?"

"That's right. Six feet tall. He wasn't the type to shrink or expand it."

"I'll buy that. And strictly logical—with their own idea of what logic is."

"Check. According to which logic we're surplus population and are to be done away with. So I decided to

warn you as to what the human race is up against and to suggest a meeting with you that we *know* can't be listened in on. Check?"

"Definitely. We'll lock our sixths on and instruct our computers to compute and effect rendezvous at null relative velocity in minimum time. Can do?"

"Can do—am doing," DuQuesne said; and Seaton, donning his helmet, perceived that the only fifth- or sixth-order stuff anywhere near the *Skylark of Valeron*—except what she was putting out herself, of course—was the thin, tight beam that was the base-line.

Seaton thought into his helmet for a few seconds; then, discarding it, he went around the bed, got into it on his own side, and started to kiss Dorothy a second good night.

"But, Dick," she protested. "That DuQuesne! Do you think it's safe to let him come actually aboard?"

"Yes. Not only safe, but necessary—we don't want to be blabbing that kind of stuff all over a billion parsecs of space. And safe because I still say we're better than he is at anything he wants to start, for fun, money, chalk, or marbles. So good night again, ace of my bosom."

"Hadn't you better notify somebody else first? Especially the Norlaminians?"

"You said it, presh; I sure should." Seaton put on his helmet; and it was a long time before either of the Seatons got back to sleep. Long for Dorothy, heroically keeping eyes closed and breathing regularly so that her husband would not know how shaken and terrified she really was;

long for Seaton himself, who lay hour upon endless hour, hands linked behind his head, gray eyes staring fiercely up into the darkness.

It had been a long time since Richard Ballinger Seaton and Marc C. DuQuesne had locked horns last. This galaxy—this cluster—this whole First Universe was not large enough for the two of them. When they met again one of them would dispose of the other.

It was as simple as that. Yet Seaton had accepted a call for help. The whole enormous complex of defenses that he had labored so hard and long to erect against DuQuesne would now be diverted to another, perhaps even a greater, threat to the safety of civilization. It was right and proper that this should be so.

But Seaton knew that whatever the best interests of civilization in this matter, there could and would never be any greater personal threat to himself than was incarnate in the cold, hard, transcendently logical person of Blackie DuQuesne.

IX

Among the Jelmi

And half a universe away other events were moving to fruition.

As has been said, the eight hundred Jelmi aboard the ship that had once been a Llurdan cruiser were the selected pick of the teeming billions of their race inhabiting two hundred forty-one planets. The younger ones had been selected for brains, ability, and physical perfection; the older ones for a hundred years or more of

outstanding scientific achievement. And of the older group, Tammon stood out head and shoulders above all the rest. He was the Einstein of his race.

He looked a vigorous, bushily gray-haired sixty; but was in fact two hundred eleven Mallidaxian years old.

Tammon was poring over a computed graph, measuring its various characteristics with vernier calipers, a filar microscope, and an integrating planimeter, when Mergon and Luloy came swinging hand in hand into his laboratory. Both were now fully recovered from the wounds they had suffered in that hand-to-hand battle with the Llurdi on now-far-distant Llurdi. Muscles moved smoothly under the unblemished bronze of Mergon's skin; Luloy's swirling shoulder-length mop of gleaming chestnut hair was a turbulent glory.

"Hail, Tamm," the two said in unison, and Mergon went on: "Have you unscrewed the inscrutability of that anomalous peak yet?"

Tammon picked up another chart and scowled at a sharp spike going up almost to the top of the scale. "This? I'm not exactly sure yet, but I may have. At least, by recomputing with an entirely new and more-than-somewhat weird set of determinors, I got this," and he ran his fingertip along the smooth curve on the chart he had been studying.

Mergon whistled through his teeth and Luloy, after staring for a moment said, "Wonderful! Expound, oh sage, and elucidate."

"It had to have at least one com-

ponent in the sixth, on the level of thought, but no known determinors would affect it. Therefore I applied the mathematics of symbolic logic to a wide variety of hunches, dreams, I've - been - here - or - done - this-befores, premonitions, intuitions . . ."

"Llenderllon's eyeballs!" Luloy broke in. "So *that* was what you ran us all through the wringer for, a while back."

"Precisely. Using these new determinors in various configurations—dictated not by mathematical reasoning, but by luck and by hunch and by perseverance—I finally obtained a set of uniquely manipulable determinants that yielded this final smooth curve, the exactly fitting equation of which reduces beautifully to . . ."

"Hold it, Tamm," Mergon said, "you're losing me," and Luloy added,

"You lost *me* long ago. What does it *mean*?"

"It will take years to explore its ramifications, but one fact is clear: the fourth dimension of space does actually exist. Therefore the conclusion seems inescapable that . . ."

"Stop it!" Luloy snapped. "This is terribly dangerous stuff to be talking about. That terrific kind of a breakthrough is just *exactly* what Klazmon—the beast!—has been after for years. And you know very well that we're not really free; that he has us under constant surveillance."

"But by detector only," Mergon said. "A full working projection at this distance? Uh-uh. It might be smart, though, to be a little on the careful side, at that."

Days lengthened into weeks. The ex-Llurdan cruiser, renamed the *Mallidax* and converted into a Jelman worldlet, still hurtled along a right-line course toward the center of the First Universe, at a positive-and-negative acceleration that would keep her—just barely!—safe against collision with intergalactic clouds of gas or dust.

The objective of their flight was a small sun, among whose quite undistinguished family of planets were a moderate-sized oxygen-bearing world and its rather large, but otherwise uninteresting companion moon.

Tammon, hot on the trail of his breakthrough in science, kept his First Assistant Mergon busy fourteen or sixteen hours per day designing and building—and sometimes inventing—new and extremely special gear; and Mergon in turn drove Luloy, his wife and Girl Friday, as hard as he drove himself.

Tammon, half the time, wore armor and billion-volt gloves against the terribly lethal forces he was tossing so nonchalantly from point to point. Mergon, only slightly less powerfully insulated, had to keep his variable-density goggles practically opaque against the eye-tearing frequencies of his welding arcs. And even Luloy, much as she detested the feel of clothing against her skin, was as armored and as insulated as was either of the men as she tested and checked and double-checked and operated; with heavily gloved flying fingers, the maze of unguarded controls that was her constructor station.

And all the other Jelmi were working just as hard; even—or especially?

—Master Biologist Sennlloy: who, with her long, thick braids of Norse-goddess hair piled high on her head and held in place by a platinum-filigrée net, was delving deeper and ever deeper into the mystery of life.

Any research man worth his salt must not be the type to give up: he must be able to keep on butting his head against a stone wall indefinitely without hoisting the white flag. Thus, Tammon developed the theory after theory after theory for, and Mergon and Luloy built model after model after model of, mechanisms to transport material objects from one place to another in normal space by moving them *through* the fourth dimension—and model after model after model failed to work.

They failed unflinchingly. Unanimously. Wherefore Mergon had run somewhat low on enthusiasm when he and Luloy carried the forty-ninth model of the series into Tammon's laboratory to be put to the test. While the old savant hooked the device up into a breadboard layout of gadgetry some fifteen feet long, Mergon somewhat boredly picked up an empty steel box, dropped six large ball-bearings into it, closed and hasped its cover, grasped it firmly in his left hand, and placed an empty steel bowl on the bench.

"Now," Tammon said, and flipped a switch—and six heavy steel balls clanged into the bowl out of nowhere.

"Huh?" Mergon's left hand had jumped upward of its own accord; and, fumbling in his haste, he opened the box in that hand and stared. Jaw actually agape, at its empty interior.

"Llenderllon's eyeballs!" Luloy shrieked. "This one works!"

"It does indeed," a technician agreed, and turned anxiously to Tammon. "But sir, doesn't that fact put us into a highly dangerous position? Even though Klazmon can't operate a full working projection at this distance, he undoubtedly has had all his analytical detectors out all this time and this successful demonstration must have tripped at least some of them."

"Not a chance," Mergon said. "He'll never find these bands—it'd be exactly like trying to analyze a pattern of fifth- or sixth-order force with a visible-light spectroscope."

"It probably would be, at that," the technician agreed, and Luloy said, "But what I've been wondering about all along is, what good is it? What's it for? Except robbing a bank or something, maybe."

"It reduces theory to practice," Tammon told her. "It gives us priceless data, by the application of which to already-known concepts we will be able to build mechanisms and devices to perform operations hitherto deemed impossible. Operations unthought-of, in fact."

"Maybe we should be pretty careful about it, though, at that," Mergon said. "To do very much real development work, we'll have to be using a lot of fairly unusual sixth-order stuff that he can detect and analyze. That will make him wonder what we're up to and he won't stop at wondering. He'll take steps."

"Big steps," Luloy agreed.

Tammon nodded. "That is true . . . and we must land somewhere to

do any worthwhile development work, since this ship is not large enough to house the projectors we will have to have. Also, we are short of certain necessities for such work, notably neutronium and faldons . . . and the projectors of these ultra-bands will have to be of tremendous power, range, and scope . . . you are right. We must find a solar system emanating sixth-order energies. Enough of them, if possible, to mask completely our own unavoidable emanations. We now have enough new data so that we can increase tremendously the range, delicacy, and accuracy of our own detectors. See to it, Mergon, and find a good landing-place."

"Yes, sir!" and Mergon went, with enthusiasm again soaring high, to work.

Rebuilding and re-powering their detector systems did not take very long; but finding the kind of landing place they needed proved to be something entirely else.

They had more or less assumed that many galaxies would show as much sixth-order activity as did their own, but that assumption was wrong. In three weeks they found only three galaxies showing any at all; and not one of the three was emanating as much sixth-order stuff as their own small vessel was putting out.

After another week or so, however, the savant on watch asked Mergon to come to his station. "There's something tremendous up ahead and off to starboard, Merg. That spot there." He pointed. "It's been there for almost half an hour and it hasn't in-

creased by a thousandth of what I expected it to. I would have said that at that distance nothing could possibly register that high."

"Did you check your circuits?" Mergon asked.

"Of course; everything's on the green."

"Main Control!" Mergon snapped into a microphone. "Mergon speaking. Flip one eighty immediately. Decel max."

"Flip one eighty," the speaker said, and the vessel turned rapidly end for end. ". . . ON the mark and decelerating at max."

Mergon whirled around and sprinted for Tammon's laboratory. He yanked the door and reported, concluding, "It's apparently emanating thousands of times as much as our whole galaxy does, so we'd better sneak up on it with care."

"Can we stop in time or will we have to overshoot and come back to it from the other side? That may affect course, you know."

Mergon hadn't thought of that point, but he soon found out. They couldn't stop quite in time, but the overshoot would be a matter of less than a day.

"See to it, Mergon," Tammon said, and resumed his interrupted studies.

The approach was made. Surprise turned to consternation when it was learned that practically all of that emanation was coming from one planet instead of a thousand; but since that condition was even better than any that had been hoped for, they shielded everything that could be shielded and sneaked up on that ex-

traordinary world — the third planet of a Type G sun. It had an unusually large satellite . . . and ideal location for their proposed operation . . . there were two small clusters of dome-shaped structures . . . abandoned . . . quite recently . . . with advanced technology all such things and procedures would of course be abandoned . . . and there were bits and pieces of what looked like wreckage.

Seaton — who had not yet seen at close up any part of the moon! — would have recognized at a glance the American and the Russian Lunar outposts, and also what was left of Ranger Seven and of several other American and Russian moon-rockets.

As a matter of fact, the Jelmi could deduce, within fairly narrow limits, what had happened on Earth's moon.

But all they cared about was that, since the moon was not inhabited at that time, they would probably not attract undue attention if they landed on it and, thoroughly and properly screened, went to work. And Klazmon could not possibly detect them there.

Luna's mountains are high and steep. Therefore, after the *Mallidan* had come easily to ground at the foot of one such mountain, it took only a day for the *Mallidan's* mighty construction-projectors to hollow out and finish off a sub-Lunar base in that mountain's depths.

And next day, early, work was begun upon the tremendous new superdreadnought of the void that was going to be named the *Mallidaxian*.

Jelmi on the Moon

Miss Madlyn Mannis—nee Gretchen Schneider — stood in the shade of a huge beach umbrella (perish forbid that any single square inch of that petal-smooth, creamily flawless epidermis should be exposed to Florida's fervent sun!) on Clearwater Beach. She was digging first one set of red-nailed toes and then the other, into the soft white sand, and was gazing pensively out over the wavelets of the Gulf.

She was a tall girl, and beautifully built, with artistically waved artistically red hair: and every motion she made was made with the lithe grace of the highly trained professional dancer that she in fact was. She was one of the best exotic dancers in the business. As a matter of box-office fact, she was actually almost as good as she thought she was.

She was wearing the skimpiest neobikini ever seen on Clearwater Beach and was paying no attention whatever, either to the outraged glares of all the other women in sight or to the distinctly unoutraged glances of the well built, deeply tanned, and highly appreciative young man who was standing some twenty feet away.

She was wondering, however, and quite intensely, about the guy. He'd been following her around for a couple of weeks. Or had he? She'd seen him somewhere every day — but he couldn't *possibly* have followed her here. Not only she hadn't known she was coming here until just before

she started, but she had come by speedboat and had found him on the beach when she arrived!

And the man was wondering, too. He knew that he hadn't been following her. Without hiring an eye, he wouldn't know how to. And the idea that Madlyn Mannis would be following *him* around was ridiculous — it *really* stunk. But how many times in a row could heads turn up by pure chance alone?

He didn't dare move any closer, but he kept on looking and he kept on wondering. Would she slug him or just slap him or maybe even accept it, he wondered, if he should offer to buy *the* Miss Mannis a drink . . .

Miss Mannis was also being studied, much more intensively and from much closer viewpoints, by two Jelmi in an immense new spaceship, the *Mallidaxian*, on the moon; and the more they studied the Mannis costume the more baffled they became.

As had been said, the Jelmi had had to build this immense new spaceship because the comparatively tiny *Mallidan*, in which they had escaped from the Realm of the Lloridi, had proved too small by far to house the outsized gear necessary for accurately controlled intergalactic work of any kind. The *Mallidaxian*, however — built as she was of inoson and sister-ship as she was to the largest, heaviest, and most powerful space-sluggers of the Realm — was not only big enough to carry any instrumentation known to the science of the age, but also powerful enough to

cope with any foreseeable development or contingency.

The Jelman sub-Lunar base had been dismantled and collapsed. Its every distinguishing feature had been reduced to moon-dust. The *Mallidaxian's* slimly powerful length now extended for a distance of two and one half miles from the mountain's foot out into the level-floored crater: in less than an hour she would take off for Mallidax, the home world of Tammon, Mergon, Luloy, and several other top-bracket Jelmi of the fugitive eight hundred.

The vessel's officers and crew were giving their instruments and mechanisms one last pre-flight check. Tammon was still studying the offensive and defensive capabilities of Cape Kennedy; Mergon and Luloy — among others — had been studying the human beings of this hitherto unknown world. Everyone aboard, of course, had long since mastered the principal languages of Earth.

That Madlyn Mannix should have been selected for observation was not very astonishing. Some thousands of Earthmen — and Earthwomen, Earthchildren, even Earthdogs and cats — had been. There was that about Madlyn Mannix, however, and to a lesser degree about the male with whom she seemed in some way associated, that seemed to deserve special study. For one thing, the Jelmi had been totally unable to deduce any shred of evidence that might indicate her profession — not so surprising, since the work of a stripper must seem pure fantasy to a world which habitually wears no clothes at all! Madlyn, although used

to being talked about, would have been quite astonished to learn how interestedly she was being discussed on the far side of the moon.

"Oh, let's bring her up here, Merg," Luloy said in disgust. "I want to talk to her — find out what this idiocy means. We'd better bring that fellow along, too: she'd probably be scared out of her wits — if any — alone."

"Check," Mergon said, and the two Tellurians appeared, standing close together, in the middle of the room.

The girl screamed once; then, her eyes caught by the awesome moonscape so starkly visible through the transparent wall, she froze and stared in terror. Then, finding that she was not being hurt, she fought her terror down. She took one fleeting glance at Mergon, blushed to the waist, and concentrated on Luloy. "Why, you must . . . you *do* go naked!" she gasped. "All the time! How utterly, *utterly* shameless!"

"Shameless?" Luloy wrinkled her nose in perplexity. "That's what I want to talk to you about, this 'shame' concept. I can't understand it and its dictionary definition is senseless to the point of unsanity. I never heard of a concept before that so utterly lacked sense, reason, and logic. What significant difference can there *possibly* be between nakedness and one ribbon and two bits of gauze? And why in the name of All-Seeing Llenderllon wear any clothing at all when you don't have to? Against cold or thorns or whatever? And especially when you swim? And you take *off* your clothes too . . ."

"I do no such thing!" The dancer drew herself up haughtily. "I am an artiste. An exotic dancer's disrobing is a fine art, and I am Madlyn Man- nis, the exotic dancer."

"Be that as it may, just answer one question and we'll put you back where you were, on the beach. What possible logical, reasonable, or even comprehensible relationship can there be between clothing and sex?"

While the girl was groping for an answer, the man took one step forward and said, "She can't answer that question. Neither can I, fully, but I can state as a fact that such a relationship is a fact of our lives; of the lives of all the peoples — even the least civilized peoples — of our world. It's an inbred, ages-old, world-wide sexual taboo. Based, possibly or even probably, upon the idea 'out of sight, out of mind'."

"A sexual taboo?" Luloy shook her head in complete bafflement. "Why, I never heard of anything so completely idiotic in my whole life! Will you wear these thought-caps with me for a moment, please, so that we may explore this weird concept in depth?"

The girl flinched away from the helmet at first, but the man reached out for his, saying, "I've always claimed to have an open mind, but *this* I've got to see."

Since complete non-comprehension of motivation on one side met fundamental ignorance on the other, however, thoughts were no more illuminating than words had been.

"Neither she nor I know enough about the basics of that branch of anthropology," the man said, handing the helmet back to Luloy. "You'd

better get a book. *Mores and Customs of Tellus*, by David Lisser, in five volumes, is the most complete work I know of. You can find it in any big bookstore. It's expensive, though — it costs seventy-five dollars."

"Oh? And we haven't any American money and we don't steal . . . but I've noticed that highly refractive bits of crystalline carbon of certain shades of color are of value here."

Turning her back on the two Tellurians, Luloy went to the laboratory bench, opened a drawer, glanced into it, and shook her head. She picked up a helmet, thought into it, and there appeared upon the palm of her hand a perfectly cut, perfectly polished, blue-white diamond half the size of an egg.

She turned back toward the two and held out her hand so that the man could inspect the gem, saying, "I have not given any attention at all to your monetary system, but this should be worth enough, I think, to leave in the place of the book of five volumes. Or should it be bigger?"

Close up, the man goggled at blue-white fire. "*Bigger! Than that rock? Lady! Are you kidding?* If that thing will stand inspection it'll buy you a library, buildings and all!"

"That's all I wanted to know. Thank you." Luloy turned to Mergon. "They don't know any more than . . ."

"Just a minute, please," the man broke in. "If diamonds don't mean any more than that to you, why wouldn't it be a good idea for you

to make her some? To alleviate the shock she has just had? Not as big, of course; none bigger than the end of my thumb."

Luloy nodded. "I know. Various sizes, for full-formal array. She's just about my size, so eleven of your quarts will do it."

"My God, no. . . ." Madlyn began, but the man took smoothly over.

"Not quite, Miss Luloy. Our ladies don't decorate their formals as lavishly as you apparently do. One quart, or maybe a quart and a half, will do very nicely."

"Very well," Luloy looked directly at the man. "But you won't want to be lugging them around with you all the rest of the day — they're heavy — so I'll put them in the right-hand top drawer of the bureau in your bedroom. Good-by," and Mergon's hands began to move toward his controls.

"Wait a minute!" the man exclaimed. "You *can't* just dump us back where we were without a word of explanation! While spaceships aren't my specialty — I'm a petrochemical engineer tee eight — I've never imagined anything as big as this vessel actually flying, and I'm just about as much interested in that as I am in the way we got here — which *has* to be fourth-dimensional translation; it *can't* be anything else. So if everything isn't top secret, how about showing us around a little?"

"The fourth-dimension device is top secret; so much so that only three or four of us know anything about it. You may study anything else you please. Bearing in mind that we have only a few seconds over three of your

minutes left, where would you like to begin?"

"The engines first, please, and the drives."

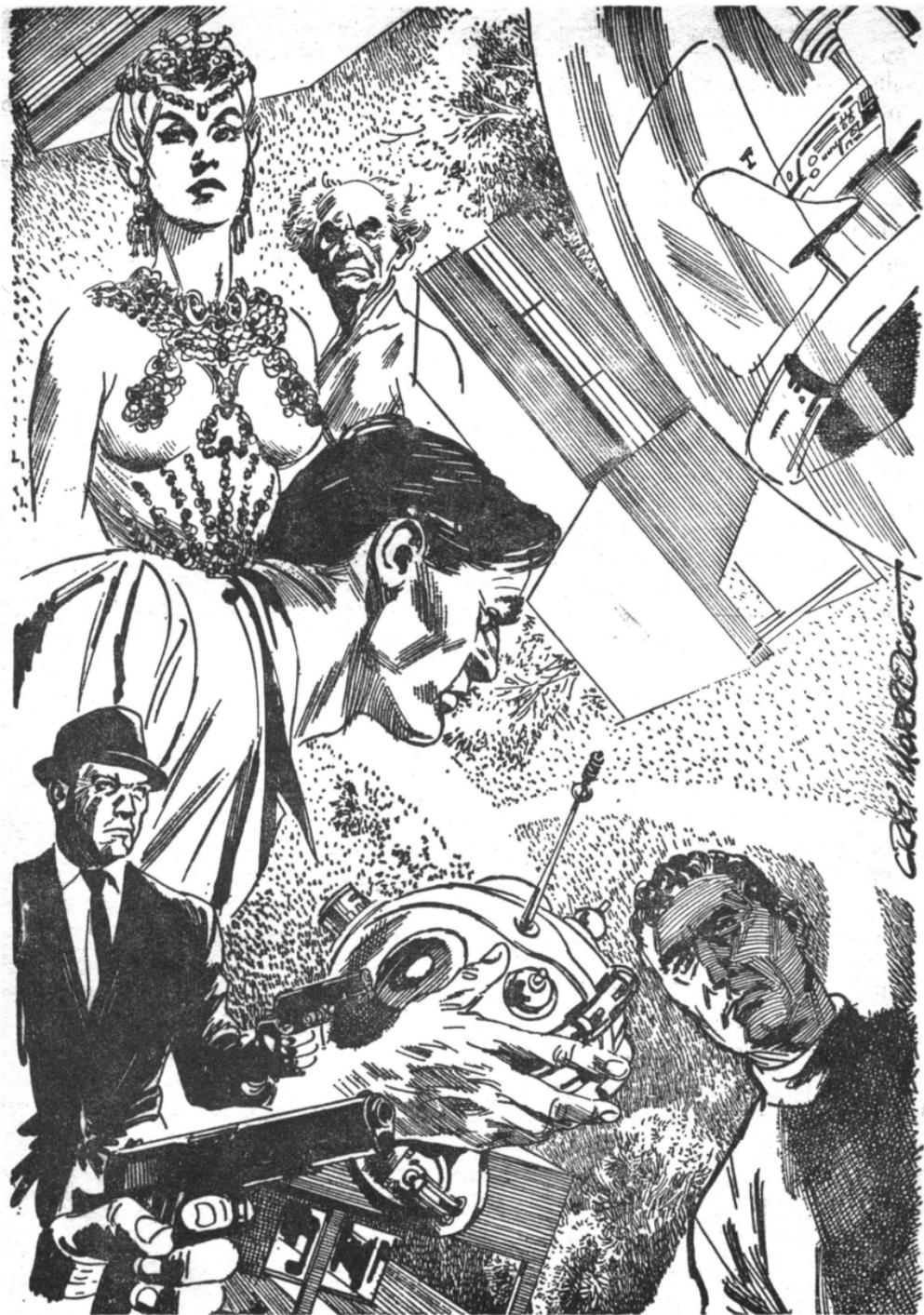
"And you, Miss Mannis? Arts? Crafts? Sciences? There is no dancing going on at the moment."

The dancer's right hand flashed out, seized her fellow Earthman's forearm and clung to it. "Wherever *he* goes I go along!" she said, very positively.

Since neither of the two Earthpeople had ever been projected before, they were both very much surprised at how much can be learned via projection, and in how short a time. They saw tremendous receptors and generators and propulsors; they saw the massed and banked and tiered keyboards and instrumentation of the control stations; they saw how the incredibly huge vessel's inoson structural members were trussed and latticed and braced and buttressed to make it possible for such a titanic structure to fly.

Since everything aboard the original Jelman vessel had been moved aboard this vastly larger one before the original had been reduced to moon-dust, the dancer and her companion also saw beautiful, splendid, and magnificent — if peculiarly un-earthly — paintings and statues and tapestries and rugs. They heard music, ranging from vast orchestral recordings down to the squeakings and tootlings of beginners learning to play musical instruments unknown to the humanity of Earth.

And above all they saw people. Hundreds and hundreds of people; each one completely naked and each



Ed Wood

one of a physical perfection almost never to be found on Earth.

At time zero minus twenty seconds Mergon cut off the projectors and the Earthman looked at Luloy.

She not only had swapped the diamond for the five-volume set of books, she had already read over a hundred pages of Volume One. She was flipping pages almost as fast as her thumb and forefinger could move, and she was absorbing the full content of the work at the rate of one glance per page.

"You people seem to be as human as we are," Madlyn said, worriedly, "but outside of that you're nothing like us at all in any way. *Where* did you come from anyway?"

"I can't tell you," Mergon said, flatly "Not that I don't want to, I can't. We're what you call human, yes; but our world Mallidax is a myriad of galaxies away from here — so far away that the distance is completely incomprehensible to the mind. Good-by."

And Madlyn Mannis found herself — with no lapse of time and with no sensation whatever of motion — standing in her former tracks under the big umbrella on the beach. The only difference was that she was now standing still instead of digging her toes into the sand.

She looked at her fellow moon-traveler. He, too, was standing in the same place as before, but he now looked as though he had been struck by lightning. She swallowed twice, then said, "Well, I'm awfully glad I wasn't alone when *that* hap . . ." she broke off abruptly, licked her

lips, and went on in a strangely altered tone, "Or am I nuttier than a fruit-cake? *Vas* you dere, Shar-lee?"

"I vas dere, Madlyn." He walked toward her. He was trying to grin, but was not having much success with it. "And my name is Charley — Charles K. van der Gleiss."

"My God! That makes it even worse — or does it?"

"I don't see how anything could; very well or very much . . . but I need a drink. How about you?"

"*Brother! Do I!* But we'll have to dress. You can't get anything on the beach here that's strong enough to cope with anything like *that!*"

"I know. City owned. Teetotal. I'll see you out in front in a couple of minutes. In a taxi."

"Make it five minutes, or maybe a bit more. And if you run out on me, Charles K. van der Gleiss, I'll . . . I'll hunt you up and kill you absolutely dead, so help me!"

"Okay, I'll wait, but make it snappy. I need that drink."

She had snatched up her robe and had taken off across the sand like a startled doe; her reply came back over one shoulder. "*You* need a drink? Oh, *brother!*"

XI

Blotto

The world had come a long way from the insular, mud-bound globe of rock and sea of the 1950s and 1970s; Seaton and Crane had seen to that. Norlaminian observers were a familiar sight to most humans — if not in person, then surely

through the medium of TV or tapefax. A thousand worlds had been photographed by Tellurian cameramen and reporters; the stories of the Osnomians, the Fenachrone, the Valeronians, even the Chlorans and the other weirdly non-human races of the outer void were a matter of public record.

Nevertheless, it is a far different thing from knowing that other races exist to find yourself a guest of one of them, a quarter of a million miles from home; wherefore Madlyn and Charley's expressed intentions took immediate and tangible form.

Madlyn Mannis and Charles K. van der Gleiss were facing each other across a small table in a curtained booth; a table upon which a waiter was placing a pint of bonded hundred-proof bourbon and the various items properly accessory thereto. As soon as the curtain fell into place behind the departing waiter the girl seized the bottle, raised it to her mouth, and belted down a good two fingers — as much as she could force down before her coughing, choking, and strangling made her stop.

"Hey! Take it easy!" the man protested, taking the bottle from her hand and putting it gently down on the table. "You're not used to guzzling it like *that*; that's for plain damn sure."

She gulped and coughed a few times; wiped her streaming eyes. "I'll tell the world I'm not; two little ones is always my limit, ordinarily. But I *needed* that jolt, Charley, to keep from flipping my lid completely. Don't you need one, too?"

"I certainly do. A triple, at least, with a couple of snowflakes of ice and about five drops of water." He built the drink substantially as specified, took it down in three swallows, and drew a profoundly deep breath. "You heard me tell them I'm a petrochemical engineer, tee eight. So maybe that didn't hit me *quite* as hard as it did you, but bottled courage helps, believe me." He mixed another drink — a single — and cocked an eyebrow at the girl. "What'll you have as a chaser for that God-awful belt?"

"A scant jigger — three-quarters, about — in a water glass," she said, promptly. "Two ice-cubes and fill it up with ice-water." He mixed the drink and she took a sip. "Thanks, Charley. This is *much* better for *drinking* purposes. Now maybe I can talk about what happened without blowing my top. I was going to wonder why we've been running into each other all the time lately, but that doesn't amount to *anything* compared to... I actually thought... in fact, I know very well... we were on... weren't we? Both of us?"

"We were both on the moon," he said flatly. "To make things worse, we were inside a spaceship that I still don't believe can be built. Those are *facts*."

"Uh-uh; that's what I mean. Positively *nobody* ever went to the moon or anywhere else off-Earth without being *in* something, and we didn't have even the famous paddle. And *posi-damn*-tively nobody — but *nobody*! — ever got into and out of a tightly closed, vacuum-tight spaceship without anybody opening any

doors or ports or anything. How do you play them tunes on your piccolo, friend?"

"I don't; and the ship itself was almost as bad. Not only was it impossibly big; it was full of stuff that makes the equipment of the *General Hoyt S. Vanderberg* look like picks and shovels." She raised an eyebrow questioningly and he went on, "One of the missile-tracking vessels — the hairiest hunks of electronic gadgetry ever built by man. What it all adds up to is a race of people somewhere who know as much more than even the Norlaminians do as we do than grasshoppers. So I think we had better report to the cops."

"The cops!" she spat the word out like an oath. "Me? Madlyn Mannis? Squeal to the fuzz? When a great big gorilla slugs me in the brisket and heists fifteen grands' worth of diamonds off of me and I don't get..."

She broke off suddenly. Both had avoided mentioning the diamonds, but now the word was accidentally out. She shook her head vigorously, then said, "Uh-uh. They aren't there. Who ever heard of diamonds by the quart? Anyway, even if that Luloy could have done it and did, I'll bet they evaporated or something."

"Or they'll turn out to be glass," he agreed. "No use looking, hardly, I don't think. Even if they are there and are real, you couldn't sell 'em without telling where they came from — and you can't do that."

"I couldn't? Don't be naive, Char-

ley. Nobody ever asks me where I got any diamonds I sell — I'd slap his silly face off. I can peddle your half, too, at almost wholesale. Not all at once, of course, but a few at a time, here and there."

"Half, Uh-uh," he objected. "I was acting as your agent on that deal. Ten per cent."

"Half," she insisted; then grinned suddenly. "But why argue about half of nothing? To get back onto the subject of cops — the lugs! — they brushed my report off as a stripper's publicity gag and I didn't get even one line in the papers. And if I report *this* weirdie they'll give me a one-way, most-direct-route ticket to the nearest funny-farm."

"You've got a point there." He glowered at his drink. "I can see us babbling about instantaneous translation through the fourth dimension and an impossible spaceship on the moon manned by people exactly like us — except that the men all look like Green Bay Packers and all the girls without exception are stacked like... like..." Words failed him.

Madlyn nodded thoughtfully. "Uh-huh," she agreed. "They were certainly stacked. That Luloy... that biologist Sennilloy, who was studying all those worms and mice and things... all of 'em. And they swap hundred-carat perfect blue-white diamonds for books."

"Yeah. We start blabbing that kind of stuff and we wind up in wrap-arounds."

"You said it. But we've got to do *something!*"

"Well, we can report to an Observer —"

"I've got a better idea. Let's tie one really on."

Neither of them remembered very much of what happened after that, but at about three o'clock the following afternoon Charley van der Gleiss struggled upward through a million miles of foul-tasting molasses to consciousness. He was lying on the couch in his living room; fully dressed, even to his shoes. He worked himself up, very carefully, to a sitting position and shook his head as carefully. It didn't quite explode. Good — he'd probably live.

Walking as though on eggs, he made cautious way to the bedroom. She was lying, also fully dressed, on his bed. On the coverlet. As he sat gingerly down on the side of the bed she opened one eye, then the other, put both hands to her head, and groaned; her features twisting in agony. "Stop shaking me, you . . . please," she begged. "Oh, my poor head! It's coming clear off . . . right at the neck . . ."

Then, becoming a little more conscious, she went on, "It didn't go back into the woodwork, Charley, did it? I'll see that horrible moon-scape and that naked Lukoy as long as I live."

"And I'll see that nightmare of a spaceship. While you're taking the first shot at the bathroom I'll have 'em send up a gallon of black coffee, a couple of quarts of orange juice, and whatever the pill-roller downstairs says is good for what ails us. In the meantime, would you like a hair of the dog?"

"My God, no!" She shuddered

visibly. "I never got drunk in my life before — I have to keep in shape, you know — and if I live through this I swear I'll never take another drink as long as I live!"

When they began to feel better Madlyn said, "Why don't you peek into that drawer, Charley? There just *might* be something in it."

He did, and there was, and he gave her the honor of lifting the soft plastic bag out of the drawer.

"My God!" she gasped. "There's four or five *pounds* of them!" She opened the bag with trembling fingers and stood entranced for half a minute, then took out a few of the gems and examined them minutely.

"Charley," she said then, "if I know anything about diamonds — and I admit that I know a lot — these are not only real, but the finest things I have ever seen. I'm almost afraid to try to sell even the littlest ones. Men just simply don't give girls rocks like that. I'm not even sure that there are very many others like those around. If any."

"Well, we would probably have had to talk to an Observer anyway, and this makes it a forced putt. Let's go, Maddy."

"In *this* wreckage?" Expression highly scornful, she waved a hand at her rumpled and wrinkled green afternoon gown. "Are you completely out of your mind?"

"Oh, that's easy. I'll shave and put on a clean shirt and an intelligent look and then we'll skip over to your place for you to slick up and *then* we'll go down to the Observer's office. Say, have you got a safe-deposit box?"

"No, but don't worry about that for a while, my friend. We haven't got 'em past the Observer yet!"

An hour later, looking and feeling almost human again, the two were ushered into the Observer's heavily screened private office. They told him, as nearly as they could remember, every detail of everything that had happened.

He listened attentively. He had been among the Tellurians only a few short months; in the cautious thoughtful way of Norlaminians, he was far from ready to claim that he understood them. These two in particular seemed quite non-scientific and un-logical in their attitudes... and yet, he thought, and yet there was that about them which seemed to deserve a hearing. So he heard. Then he put on a headset and saw. Visually he investigated the far side of the moon; then, frowning slightly, he increased his power to microscopic magnification and re-examined half a dozen tiny areas. He then conferred briefly with Rovol of Rays on distant Norlamin, who in turn called Seaton into a long-distance three-way.

"No doubt whatever about it," Seaton said. "If they hadn't been hiding from somebody or something they wouldn't have ground up that many thousands of tons of inoson into moon-dust — that's a project, you know — and I don't need to tell you that inoson does *not* occur in nature. Yes, we definitely need to know more about this one. Coming in!"

Seaton's projection appeared in

the Observer's office and, after being introduced, handed thought-helmets to Madlyn and Charley. "Put these on, please, and go over the whole thing again, in as fine detail as you possibly can. It's not that we doubt any of your statements; it's just that we want to record and to study very carefully all the sidebands of thought that can be made to appear."

The two went over their stories again; this time being interrupted, every other second or two, by either Seaton or the Observer with sharply pertinent questions or suggestions. When, finally, both had been wrung completely dry, the Observer took off his helmet and said:

"Although much of this material is not for public dissemination, I will tell you enough to relieve your minds of stress; especially since you have already seen some of it and I know that neither of you will talk." Being a very young Norlaminian, just graduated from the Country of Youth, he smiled at this, and the two smiled — somewhat wryly — back.

"Wait a minute," Seaton said. "I'm not sure we want their minds relieved of too much stress. They both ring bells — loud ones. I'd swear I know you both from somewhere, except I know darn well I've never met either of you before... it's a cinch *nobody* could ever forget meeting Madlyn Mannis..." He paused, then snapped a finger sharply. "Idiot! Of course! Where were you, both of you, at hours twenty-three fifty-nine on the eighteenth?"

"Huh? What is this, a gag?" van der Gleiss demanded.

"Anything else but, believe me," Seaton assured him. "Madlyn?"

"One minute of midnight? That would be the finale of my first show... Oh-oh! Was the eighteenth a Friday?"

"Yes."

"That's it!" the girl was visibly excited now. "Something *did* happen. Don't ask me what — all I know is I was just finishing my routine, and I got this feeling — this feeling of *importance* about something. Why, you were in it!" She stared at Seaton's projection incredulously. "Yes! But — you were different somehow. I don't know how. Like a — like a reflection of you, or a bad photograph..."

Through his headset Seaton thought a quick, private three-way conference with Rovol and the Norlaminian on Earth: " — clearly refers to our beacon message —"

" — yes, but holy cats, Rovol, what's this about a 'reflection'? —" " — conceivably some sort of triggered response from another race —"

It took less than a second, then Seaton continued with the girl and her companion, who were unaware that any interchange had taken place.

"The 'something important' you're talking about, Madlyn, was a message that we broadcast. You might call it an SOS; we were looking for a response from some other race or civilization with a little more on the ball than we have. We've been hoping for an answer; it's just possible that, through you, we've got one. What was that 'reflection' like?"

"I'd call it a psychic pull," said

Madlyn promptly. "And now that you mention it, I felt it with these Jelmi too. And —" Her eyes widened, and she turned to stare at Charley.

Seaton snapped his fingers. "Look, Madlyn. Can you take time off to spend with us? I don't know what you've got into — but I want you nearby if you get into it again!"

"Why, certainly, Mr. Seaton. I mean — Doctor Seaton. I'll call Moe — that's my agent — and cancel Vegas, and —"

"Thanks," grinned Seaton. "You won't lose anything by it."

"I'm sure I won't, judging by... but oh, yes, *how* about those diamonds — *if they are?*"

"Oh, they are," the Norlaminian assured her, "and they're of course yours. Would you like to have me sell them for you?"

She glanced questioningly at van der Gleiss, who nodded and gave the jewels to the Observer. Then, "We'd like that very much, sir," Madlyn said, "and thanks a lot."

"Okay," Seaton said then. "Now, how about you, Charley. What kind of a jolt did you get at one minute of twelve that Friday night?"

"Well, it was the first time I caught Madlyn's act, and I admit it's a sockeroo. She has the wallop of a piledriver, no question of that. But if you mean spirit-message flapdoodle or psychic poppycock, nothing. I'm not psychic myself — not a trace — and nobody can sell me that anybody else is, either. That stuff is purely the bunk — it's strictly for the birds."

"It isn't either, Mister Charles K.

van der Gleiss!" Madlyn exclaimed. "And you are too psychic — very strongly so! How else would we be stumbling over each other everywhere we go? And how else would I possibly get drunk with you?" She spread her hands out in appeal to the Observer. "Isn't he psychic?"

"My opinion is that he is unusually sensitive to certain forces, yes," the Norlaminian said. "Think carefully, youth. Wasn't there something more than the mental or esthetic appreciation of, and the physical-sexual thrill at, the work of a superb exotic dancer?"

"Of course there was!" the man snapped. "But . . . but . . . oh, I don't know. Now that Madlyn mentions it, there was a sort of a feeling of a message. But I haven't got even the foggiest idea of what the goddam thing was!"

"And that," Seaton said, "is about the best definition of it I've ever heard. We haven't either."

XII

DuQuesne and the Jelmi

DuQuesne, who had not seen enough of the *Skylark of Valeron* to realize that it was an intergalactic spacecraft, had supposed that Seaton and his party were still aboard *Skylark Three*, which was of the same size and power as DuQuesne's own ship, the *Capital D*. Therefore, when it became clear just what it was with which the *Capital D* was making rendezvous, to say that DuQuesne was surprised is putting it very mildly indeed.

He had supposed that his vessel was one of the three most powerful superdreadnoughts of space ever built — but *this!* This thing was not a spaceship at all! In every important respect it was a world. It was big enough to mount and to power offensive and defensive armament of full planetary capability . . . and if he knew Seaton and Crane half as well as he thought he did, that monstrosity could volatilize a world as easily as it could light a firecracker.

He was second. Again. And such an insignificantly poor second as to be completely out of the competition.

Something would have to be done about this intolerable situation . . . and finding out what could be done about it would take precedence over everything else until he did find out.

He scowled in thought. That worldlet of a spaceship changed everything — radically. He'd been going to let eager-beaver Seaton grab the ball and run with it while he, DuQuesne, went on about his own business. But now — could he take the risk? Ten to one — or a hundred to one? — he couldn't touch that planetoid's safety screens with anything he had. But it was worth his while to try . . .

Energizing the lightest possible fifth- and sixth-order webs, he reached out with his utmost delicacy of touch to feel out the huge globe's equipment; to find out exactly what it had.

He found out exactly nothing; and in zero time. At the first, almost imperceptible touch of DuQuesne's web the mighty planetoid's every

defense flared instantaneously into being.

DuQuesne cut his webbing, the defenses vanished, and Seaton said, "No peeking, DuQuesne. Come inside and you can look around all you please, but from outside it can't be done."

"I see it can't. How do I get inside?"

"One of your shuttles or small boats. Go neutral as soon as you clear your outer skin and I'll bring you in."

"I'll do that," — and as DuQuesne in one of his vessel's life-boats traversed the long series of locks through the worldlet's tremendously thick shell he kept on wrestling with his problem.

No, the idea of letting Seaton be the Big Solo Hero was out like the well-known light. Seaton and his whole party would have to die. And the sooner the better.

He'd known it all along, really; his thinking had slipped, back there, for sure. With *that* fireball of a ship — flying base, rather — by the time Seaton got the job done he would be so big that nothing could ever cut him down to size. For that matter, was there anything that could be done about Seaton and his planetoid, even at the size they already were? There was no vulnerability apparent... on the outside, at least. But there *had* to be something; some chink or opening; all he had to do was think of it — like the time he and "Baby Doll" Loring had taken over a fully-manned superdreadnought of the Fena-chrone.

The smart thing to do, the best thing for Marc C. DuQuesne, would be to join Seaton and work hand in glove with him — for a while. Until he had a bigger, more powerful worldlet than Seaton did and knew more than all the Skylarkers put together. Then blow the *Skylark of Valeron* and everyone and everything in it into impalpable dust and go on about his own business; letting Civilization worry about itself.

To get away with that, he might have to give his word to act as one of the party, as before.

He never had broken his word . . . so he wouldn't give it, this time, unless he had to . . . but if he had to? If it came to a choice — breaking his word or being Emperor Marc the First of a galaxy, founder of a dynasty the like of which no civilization had ever seen before?

Whatever happened, come hell or high water, Seaton and his crew must and would die. He, DuQuesne, must and would come out on top!

As soon as DuQuesne's lifeboat was inside the enormous hollow globe that was the *Skylark of Valeron*, Seaton brought it to a gentle landing in a dock behind his own home and walked out to the dock with a thought-helmet on his head and its mate in his hand.

DuQuesne opened his lifeboat's locks and Seaton joined him in the tiny craft's main compartment.

Face to face, neither man spoke in greeting or offered to shake hands; both knew that there was nothing of friendship between them

or ever would be. Nor did DuQuesne wonder why Seaton was meeting him thus; outside and alone. He knew exactly what the women, especially Margaret, thought of him; but such trifles had no effect whatever upon the essence of Marc C. DuQuesne.

Seaton handed DuQuesne the spare headset. DuQuesne put it on and Seaton said in thought, "This, you'll notice, is no ordinary mechanical educator; not by seven thousand rows of Christmas trees. I suppose you know you're in the *Skylark of Valeron*. Study it, and take your time. I'll give you her prints before you go—if we're going to have to be allies again you ought to have something better than your *Capital D* to work with."

Seaton thought that this surprise might make DuQuesne's guard slip for an instant, but it didn't. DuQuesne studied the worldlet intensively for over an hour, then took off his headset and said:

"Nice job, Seaton. Beautiful; especially that tank-chart of the First Universe and that super-computer brain—some parts of which, I see, this headset enables me to operate. The rest of it, I suppose, is keyed to and in sync with your own mind? No others need apply?"

"That's right. So, with the prints, you'll have everything you need, I think. But before you go into detail, I may know a thing that you don't and that may have a lot of bearing, one place or another. Have you ever heard of any way of getting into or through the fourth dimension except by rotation?"

"No. Not even in theory. How sure are you that there is or can be any other way of doing it?"

"Positive. One that not even the Norlaminians know anything about," and Seaton gave DuQuesne the full picture and the full story and all the side-bands of thought of everything that had happened to Madlyn Mannis and Charles van der Gleiss.

At the sight of Mergon and Luloy —two of the three Jelmi whom the monstrous alien Klazmon had been comparing with the Fenachrone and with the chlorine-breathing amoeboid Chlorans and with DuQuesne himself—it took every iota of DuQuesne's iron control to make no sign of the astounding burst of interest he felt; for in one blinding flash of revelation his entire course of action became pellucidly clear. He knew exactly where and what Galaxy DW-427-LU was. He knew how to get Seaton headed toward that galaxy. He knew how to kill Seaton and all his crew and take over the *Skylark of Valeron*. And, best of all, he knew how to cover his tracks!

Completely unsuspecting of any of these thoughts, Seaton went on, "Now we're ready, I think, for the fine details of what you found out."

After giving a precisely detailed report that lasted for twenty minutes, DuQuesne said, "Now as to location. I have a cylindrical chart—a plug-chart, you might call it—of all the galaxies lying close to the line between the point in space where your stasis-capsule whiffed out and the First Galaxy.

Those four reels there." He pointed. "But I have no idea whatever as to where that plug lies in the universe — its universal coordinates. But since you know where you are and I know how I got here, it can be computed — in time."

"In practically nothing flat," Seaton said. "As fast as you can run your tapes through your scanner there." Seaton put his headset back on; DuQuesne followed suit. "They don't even have to be in order. When the end of the last tape clears the scanner your plug will be in our tank."

And it was: a long, narrow cylinder of yellowish-green haze.

"Nice; very nice indeed." DuQuesne paid tribute to performance. "I started my trip right there." He marked the spot with a tiny purple light. It was a weird sensation, this; working, with that gigantic brain, in that super-gigantic tank-chart, with only a headset and at a distance of miles!

"With my artificial gravity set to exact universal north as straight up," DuQuesne went on, "I moved along a course as close as possible to the axis of that cylinder to this point here." The purple point extended itself into a long line of purple light and stopped. "Klazmon's tight beam hit me at that point there, coming in from eighty-seven point four one eight degrees starboard and three point nine two six degrees universal south."

DuQuesne's mind, terrifically hard held for that particular statement, revealed not the faintest

side-band or other indication of what a monstrous lie that was. The figures themselves were very nearly right; but the fact that the beam had actually come in from the port and the north made a tremendous difference. The purple line darted off at almost a right angle to itself and DuQuesne went on without a break:

"You'll note that there are two galaxies on that line; one about half way out to the rim of the universe —" this galaxy actually was, in Klazmon's nomenclature, Galaxy DW-427-LU — "the other one clear out; right on the rim itself. Under those conditions no reliable estimate of distance was possible, but if we assume that Klazmon's power is of the same order of magnitude as ours it would have to be the first one. However, I'm making no attempt to defend that assumption."

"Sure not; but it's safe enough, I'd say, for a first approximation. So, making that assumption, that galaxy is where the Realm of the Llurdi is — where the Llurdi and the Jelmi are. Where the folks that built that big battlewagon on the moon came from."

"While the data do not prove it, by any means, that would be my best-educated guess. But my next one — that that's where they're going back to — isn't based on anything anywhere near that solid. Sidebands only, and not too many or too strong."

"Yeah, I got some, too. But you're having first cut at this; go ahead," Seaton said.

"Okay. First, you have to dig up

some kind of an answer to the question of why those Jelmi came such an ungodly long distance away from home to do what was, after all, a small job of work. We know that they didn't do it just for fun. We know that the whole race of Jelmi is oppressed; we know that those eight hundred rebelled. We're fairly sure that Earth alone is, right now, putting out more sixth-order emanation than all the rest of the First Universe put together.

"Okay. There were some indications that Tammon worked out the theory of that fourth-dimensional gizmo quite a while back; but they had to come this tremendous distance to find enough high-order emanation to mask their research and development work from His Nibs Llanzlan Klazmon the Fifteenth.

"Now. My argument gets pretty tenuous at this point, but isn't it a fairly safe bet that, having reduced the theory of said gizmo to practice and having built a ship big enough to handle it like toothpicks, they'd beat it right back home as fast as they could leg it, knock the living hell out of the Llurdi — they could, you know, like shooting fish in a well — and issue a star-spangled Declaration of Independence? It does to me."

"Check. While I didn't get there by exactly the same route you did, I arrived at the same destination. So it's not only got to be investigated; it's got to be Number One on the agenda. Question; who operates? Your baby or mine?"

"You know the answer to that. I'll

have other fish to fry; quite possibly until after you have the Jelman angle solved."

"My thought exactly." Seaton assumed that DuQuesne's first, most urgent job would be to build a worldlet of his own; DuQuesne did not correct this thought. Seaton went on, "The other question, then, is — do we join forces again, or work independently... or maybe table the question temporarily, until you get yourself organized and we will have made at least a stab at evaluating what this Lluridan menace actually amounts to?"

"The last ... I think." DuQuesne scowled in thought, then his face cleared; but at no time was there the slightest seepage of side-bands to the effect that he, DuQuesne, would see to it that Seaton would be dead long before that. Or that he, DuQuesne, did not give a tinker's damn whether anything was ever done about the Lluridan menace or not.

The two men discussed less important details for perhaps ten minutes longer; then DuQuesne took his leave. And, out in deep space again, with his mighty *Capital D* again boring a hole through the protesting ether, DuQuesne allowed himself a contemptuous and highly satisfactory sneer.

Back in their own living room, Seaton asked his wife, "Dottie, did you smell anything the least bit fishy about that?"

"Not a thing, Dick. I gave it everything I had, and everything about it rang as true as a silver bell. Did you detect anything?"

"Not a thing—curse it! Even helmet to helmet—as deep as I could go without putting the screws on and blowing everything higher than up—it was flawless. But you've got to remember the guy's case-hardened and diamond finished... But you've also got to remember that I came to exactly the same conclusions he did—and completely independently."

"So every indication is that he is acting decently. He's been known to, you know."

"Yeah. It's possible." Seaton did not sound at all sold on the possibility. "But I wouldn't trust that big black ape as far as I could drop-kick him.... I'd like awfully well to know whether he's pitching us a curve or not... and if he is, what the barb-tailed devil it can possibly be... so what we'll have to do, pet, is keep our eyes peeled and look a little bit out *all* the time."

And, still scowling and still scanning and re-scanning every tiniest bit of data for flaws, Seaton set course for Galaxy DW-427-LU, having every reason to believe it the galaxy in which the Realm of the Lurdi lay. Also, although he did not mention this fact even to Dorothy, that course "felt right" to some deeply buried, unknown, and impossible sense in which he did not, could not, and would not believe.

For Seaton did not know that Galaxy DW-427-LU was in fact going to be highly important to him in a way that he could not foresee; if he had known, would not have believed; if he had believed, would not have understood.

For at that moment in time, not even Richard Ballinger Seaton knew what forces he had unleashed with his "cosmic beacon."

XIII

DuQuesne and Sennlloy

In the eyes of Blackie DuQuesne, Seaton was forever and helplessly trapped in the philosophy of the "good guy". It was difficult for DuQuesne to comprehend why a mind of as high an order of excellence as Seaton's—fully the equal of DuQuesne's own in many respects, as DuQuesne himself was prepared to concede—should subscribe to the philosophy of lending a helping hand, accepting the defeat of an enemy without rancor, refraining from personal aggrandizement when the way was so easily and temptingly clear to take over the best part of a universe.

Nevertheless, DuQuesne knew that these traits were part of Seaton's makeup. He had counted on them. He had not been disappointed. It would have been child's play for Seaton to have tricked and destroyed him as he entered that monster spaceship Seaton had somehow acquired. Instead of that, Seaton had made him a free gift of its equal!

That, however, was not good enough for Blackie DuQuesne. Seeing how far Seaton had progressed had changed things. He could not accept the status of co-belligerent. He had to be the victor.

And the one portentous hint he had gleaned from Seaton of the ex-

istence of a true fourth-dimensional system could be the tool that would make him the victor; wherefore he set out at once to get it.

Since he had misdirected Seaton as to the vector of the course of the Jelmi, sending him off on what, DuQuesne congratulated himself, was the wildest of wild-goose chases, DuQuesne need only proceed in the right direction and somehow — anyhow; DuQuesne was superbly confident that he would find a means — get from them the secret of what he needed to know. His vessel had power to spare. Therefore he cut in everything his mighty drives could take, computed a tremendous asymptotic curve into the line that the Jelmi must have taken, and took out after the intergalactic flyer that had left Earth's moon such a short time before.

DuQuesne was aware that force would be an improbably successful means of getting what he wanted. Guile was equally satisfactory. Accordingly he took off his clothes and examined himself, front and back and sides, in a full-length mirror.

He would do, he concluded. There would be nothing about his physical person which would cause him any trouble in his dealings with the Jelmi. Since he always took his sun-lamp treatments in the raw, his color gradation was right. He was too dark for a typical Caucasian Tellurian; but that was all right — he wasn't going to be a Tellurian. He would, he decided, be a native of some planet whose people went naked . . . the planet Xylmny, in a

galaxy 'way out on the Rim somewhere . . . yes, he had self-control enough not to give himself away.

But his cabin wouldn't stand inspection on a usually naked basis, nor would any other private room of the ship. All had closets designed unmistakably for clothing and it wasn't worth while to re-build them.

Okay, he'd be a researcher who had visited dozens of planets, and *everybody* had to wear some kind of clothing or trappings at some time or other. Protectively at least. And probably for formality or for decoration.

Wherefore DuQuesne, with a helmet on his head and a half-smile, half-sneer on his face, let his imagination run riot in filling closet after closet with the utilitarian and the decorative garmenture of world after purely imaginative world. Then, after transferring his own Tellurian clothing to an empty closet, he devoted a couple of hours to designing and constructing the apparel of his equally imaginary native world Xylmny.

In due time a call came in from the spaceship up ahead. "You who are following us from the direction of the world Tellus: do you speak English?"

"Yes."

"Why are you following us, Tellurian?"

"I am not a Tellurian. I am from the planet Xylmny; which, while very similar to Tellus, lies in a distant galaxy." He told the caller, as well as he could in words, where

Xylmny was. "I am a Seeker, Sevance by name. I have visited many planets very similar to yours and to Tellus and to my own in my Seeking. Tellus itself had nothing worthy of my time, but I learned there that you have a certain knowledge as yet unknown to me; that of operating through the fourth dimension of space instantaneously, without becoming lost hopelessly therein, as is practically always the case when rotation is employed. Therefore I of course followed you."

"Naturally. I would have done the same. I am Savant Tammon of the planet Mallidax — Llurdiaxorb Three — which is our destination. You, then, have had one or more successes in rotation? Our rotational tests all failed."

"We had only one success. As a Seeker I will be glad to give you the specifications of the structures, computers, and forces required for any possibility of success — which is very slight at best."

"This meeting is fortunate indeed. Have I your permission to come aboard your vessel, at such time as we approach each other nearly enough to make the fourth-dimensional transfer feasible?"

"You certainly may, sir. I'll be very glad indeed to greet you in the flesh. And until that hour, Savant Tammon, so long and thanks."

Since Mergon braked the *Mallidaxian* down hard to help make the approach, and since the two vessels did not have to be close together even in astronomical terms, it was not long until Tammon stood

facing DuQuesne in the *Capital D's* control room.

The aged savant inhaled deeply, flexed his knees, and said, "As I expected, our environments are very similar. We greet new friends with a four-hand clasp. Is that form satisfactory?"

"Perfectly; it's very much like our own," DuQuesne said; and four hands clasped briefly.

"Would you like to come aboard our vessel now?" Tammon asked.

"The sooner the better," and they were both in Tammon's laboratory, where Mergon and Luloy looked DuQuesne over with interest.

"Seeker Sevance," Tammon said then, "these are Savant Mergon, my first assistant, and Savant Luloy, his . . . well, 'wife' would be, I think, the closest possible English equivalent. You three are to become friends."

The hand-clasp was six-fold this time, and the two Jelmi said in unison. "I'm happy that we are to become friends."

"May our friendship ripen and deepen," DuQuesne improvised the formula and bowed over the cluster of hands.

"But Seeker," Luloy said, as the cluster fell apart, "must all Seekers do their Seeking alone? I'd go stark raving mad if I had to be alone as long as you must have been."

"Ture Seekers, yes. While it is true that any normal man misses the companionship of his kind, especially that of the opposite sex —" DuQuesne gave Luloy a cool, contained smile as his glance traversed her superb figure — "even such a

master of concentration as a true Seeker must be can concentrate better, more productively, when absolutely alone."

Tammon nodded thoughtfully. "That may well be true. Perhaps I shall try it myself. Now — we have some little time before dinner. Is there any other matter you would like to discuss?"

For that question DuQuesne was well prepared. A Seeker, after all, needs something to be Sought; and as he did not want to appear exclusively interested in something which even the unsuspecting Jelmi would be aware was a weapon of war, he had selected another subject about which to inquire. So he said at once:

"A minor one, yes. While I am scarcely even a tyro in biology, I have pondered the matter of many hundreds — probably many millions — of apparently identical and quite possibly inter-fertile human races spaced so immensely far apart in space that any possibility of a common ancestry is precluded."

"Ah!" Tammon's eyes lit up. "One of my favorite subjects; one upon which I have done much work. We Jelmi and the Tellurians are very far apart indeed in space, yet cross-breeding is successful. *In vitro*, that is, and as far as I could carry the experiment. I can not synthesize a living placenta. No *in vitro* trial was made, since we of course could not abduct a Tellurian woman and not one of our young women cared to bear a child fathered by any Tellurian male we saw."

"From what I saw there I don't

blame them," agreed DuQuesne. It was only the truth of his feelings about Tellurians — with one important exception. "But doesn't your success *in vitro* necessitate a common ancestry?"

"In a sense, yes; but not in the ordinary sense. It goes back to the unthinkable remote origin of all life. You can, I suppose, synthesize any non-living substance you please? Perfectly, down to what is apparently its ultimately fine structure?"

"I see what you mean." DuQuesne, who had never thought really deeply about that fact, was hit hard. "Steak, for instance. Perfect in every respect except in that it never has been alive. No. We can synthesize DNA-RNA complexes, the building blocks of life, but they are not alive and we cannot bring them to life. And, conversely, we cannot dematerialize living flesh."

"Precisely. Life may be an extra-dimensional attribute. Its basis may lie in some order deeper than any now known. Whatever the truth may be, it seems to be known at present only to the omnipotence Who we of Mailidax call L'enderllon. All we know about life is that it is an immensely strong binding force and that its source — proximate, I mean, of course, not its ultimate origin — is the living spores that are drifting about in open space."

"Wait a minute," DuQuesne said. "We had a theory like that long ago. So did Tellus — a scientist named Arrhenius — but all such theories were finally held to be untenable. Wishful thinking."

"I know. Less than one year ago,

however, after twenty years of search. I found one such spore. Its descendants have been living and evolving ever since."

DuQuesne's jaw dropped. "You don't say! *That* I want to see!"

Tammon nodded. "I have rigorous proof of authenticity. While it is entirely unlike any other form of life with which I am familiar, it is very interesting."

"It would be, but there's one other objection. What is the chance that on any two worlds humanity would have reached exactly the same stage of evolution at any given time?"

"Ah! That is the crux of my theory, which I hope some day to prove; that when man's brain becomes large enough and complex enough to employ his hands efficiently enough, the optimum form of life for that environment has been reached and evolution stops. Thenceforth all mutants and sports are unable to compete with *Homo Sapiens* and do not survive."

DuQuesne thought for a long minute. Norlamin was very decidedly *not* a Tellus-Type planet. "Some Xylmnians have it, 'Man is the ultimate creation of God.' On Tellus it's 'God created man in his own image.' And of course the fact that I've never believed it — and I still think it's unjustifiable racial self-glorification — does not invalidate it."

"Of course it doesn't. But to revert to the main topic, would you be willing to cooperate in an *in vivo* experiment?"

DuQuesne smiled at that, then

chuckled deeply. "I certainly would, sir; and not for purely scientific reasons, either."

"Oh, *that* would be no problem. Nor is your present quest — it will take only a short time to install the various mechanisms in your vessel and to instruct you in their use. If my snap judgment is sound, however, this other may very well become of paramount importance and require a few days of time." He touched a button on an intercom and said, "Senny."

"Yes?" came in a deep contralto from the speaker.

"Will you come in here, please? It concerns the *in vivo* experiment we have been discussing."

"Oh? Right away, Tamm," and in about half a minute a young woman came striding in.

DuQuesne stared, for she was a living shield-maiden — a veritable Valkyrie of flesh and blood. If she had had wings and if her pale blonde hair had been flying loose instead of being piled high on her head in thick, heavy braids, DuQuesne thought, she could have stepped right out of Wagenhorst's immortal painting *Ragnarok*.

Tammon introduced them. "Seeker Sevance of Xylmny, Savant Sennlloy of Allondax, you two are to become friends."

"I'm happy that we are to become friends," the girl said, in English, extending her hands. DuQuesne took them, bowed over them, and said, "May our friendship ripen and deepen."

She examined him minutely, from the top of his head down to his

toenails, in silence; then, turning to Tammon, she uttered a long sentence of which DuQuesne could not understand a word.

"You should speak English, my dear," Tammon said. "It is inurbane to exclude a guest from a conversation concerning him."

"It is twice as inurbane," she countered in English, "to insult a guest, even by implication, who does not deserve it."

"That is true," Tammon agreed, "but I have studied him to some little depth and it is virtually certain that the matter lies in your province rather than mine. The decision is, of course, yours. Caps-on with him, please, and decide."

She donned a helmet and handed its mate to DuQuesne. Expecting a full-scale mental assault, he put up every block he had; but she did not think at him at all. Instead, she bored deep down into the most abysmal recesses of his flesh; down and down and down to depths where he — expert though he was at synthesizing perfectly any tangible article of matter — could not follow.

Eyes sparkling, she tossed both helmets onto a bench and seized both his hands in a grip very different from the casual clasp she had used a few minutes before. "I am glad — very, very glad, friend Seeker Sevance, that we are friends!"

Although DuQuesne was amazed at this remarkable change, he played up. He bowed over her hands and, this time, kissed each of them. "I thank you, Lady Sennlloy. My

pleasure is immeasurable." He smiled warmly and went on, "Since I am a stranger and thus ignorant of your conventions and in particular of your taboos, may I without offense request the pleasure of your company at dinner? And my friends call me Vance."

She returned his smile as warmly. Neither of them was paying any attention at all to anyone else in the room. "And mine call me Senny. You may indeed, friend Vance, and I accept your invitation with joyous thanks. We go out that archway there and turn left."

They walked slowly toward the indicated exit; side by side and so close together that hip touched hip at almost every step. In the corridor, however, Sennlloy put her hand on DuQuesne's arm and stopped. "But hold, friend Vance," she said. "We should, don't you think, make this, our first meal together, one of full formality?"

"I do indeed. I would not have suggested it but I'm very much in favor of it."

"Splendid! We'll go to my room first, then. This way," and she steered him into and along a corridor whose blankly featureless walls were opaque instead of transparent.

Was this his cue? DuQuesne wondered. No, he decided. She wasn't the type to rush things. She was civilized... more so than he was. If he didn't play it just about right with this girl, who was very evidently a big wheel, she could and very probably would queer his whole deal.

As they strolled along DuQuesne

saw that the walls were not quite featureless. At about head height, every twenty-five feet or so, there was inset a disk of optical plastic perhaps an inch in diameter. Stopping, and turning to face one of these disks, Sennlloy pressed her right forefinger against it, explaining as she did so, "It opens to my fingerprints only."

There was an almost inaudible hiss of compressed air and a micro-metrically fitted door — a good seven feet high and three feet wide — moved an inch out into the hall and slid smoothly aside upon tracks that certainly had not been there an instant before. DuQuesne never did find out how the thing worked. He was too busy staring into the room and watching and hearing what the girl was doing and saying.

She stepped back a half-step, bowed gracefully from the waist, and with a sweeping gesture of both hands invited him to precede her into the room. She started to say something in her own language — Allondaxian — but after a couple of words changed effortlessly to English. "Friend Seeker Sevance, it is in earnest of our friendship that I welcome you into the privacy of my home" — and her manner made it perfectly clear that, while the phraseology was conventionally formal, in this case it was really meant.

And DuQuesne felt it; felt it so strongly that he did not bluff or coin a responsive phrase. Instead: "Thank you, Lady Sennlloy. We of Xylmny do not have anything comparable, but I appreciate your welcome and thank you immensely."

Inside the room, DuQuesne stared. He had wondered what this girl's private quarters would be like. She was a master scientist, true. But she was warmly human, not bookishly aloof. And what would seventy thousand years of evolution do to feminine vanity? Especially to a vanity that apparently had never been afflicted by false modesty? Or by any sexual taboos?

The furniture — heavy, solid, plain, and built of what looked like golden oak — looked ordinary and utilitarian enough. Much of it was designed for, and was completely filled with and devoted to, the tools and equipment and tapes and scanners of the top-bracket biologist Sennlloy of Allondax in fact was. The floor was of mathematically figured, vari-colored, plastic tile. The ceiling was one vast sheet of softly glowing white light.

Three of the walls were ordinary enough. DuQuesne scarcely glanced at them because of the fourth, which was a single canvas eight feet high and over thirty feet long. One painting. *What* a painting! A painting of life itself; a painting that seemed actually to writhe and to crawl and to vibrate with the very essence of life itself!

One-celled life, striving fiercely upward in the primordial sea toward *the light*. Fiercely striving young fishes, walking determinedly ashore on their fins. Young about-to-become-mammals succeeding in their various climbings of evolution's tremendous ladder. Striving young mammals developing tails and climbing up into trees — losing tails, with

the development of true thumbs, and coming down to earth again out of the trees — the ever-enlarging brain resulting in the appearance of true man. And finally, the development and the progress and the history of man himself.

And every being, from unicell to man, was striving with all its might upward; toward THE LIGHT. Upward! *Upward!! UPWARD!!!*

At almost the end of that heart-stopping painting there was a portrait of Sennlloy herself in the arms of a man; a yellow-haired, smooth-shaven Hercules so fantastically well-drawn, so incredibly alive-seeming, that DuQuesne stared in awe.

Beyond those two climactic figures the painting became a pure abstract of form and of line and color; an abstract, however, that was crammed full of invisible but very apparent question marks. It asked — more, it demanded and it yelled — “*What is coming next?*”

DuQuesne, who had been holding his breath, let it out and breathed deeply. “And you painted *that* yourself,” he marveled. “Milady Sennlloy, if you never do anything else as long as you live, you will have achieved immortality.”

She blushed to the breasts. “Thanks, friend Vance. I’m very glad you like it; I was sure you would.”

“It’s so terrific that words fail,” he said, and meant. Then, nodding at the portrait, he went on, “Your husband?”

She shook her head. “Not yet. He

has not the genes the Llurdi wish to propagate, so we could not marry and he had to stay on Allondax instead of becoming one of this group. But he and I love each other more than life. When we Jelmi aboard this *Mallidaxian* have taught those accursed Llurdi their lesson, we will marry and we’ll never be parted again. But time presses, friend Vance; we must consider our formalities.”

Walking around the foot of her bed — the satin coverlet of which bore, in red and gold, a motif that almost made even DuQuesne blush — she went to a bureau-like piece of furniture and began to pull open its bottom drawer. Then, changing her mind, she closed it sharply; but not before the man got a glimpse of its contents that made him catch his breath. That drawer contained at least two bushels of the most fantastic jewelry DuQuesne had ever seen!

Shaking her head, Sennlloy went on, “No. My formality should not influence yours. The fact that you appreciate and employ formality implies, does it not, that you do not materialize and dematerialize its material symbols, but cherish them?”

“Yes; you and I think very much alike on that,” DuQuesne agreed. He was still feeling his way. This *hadn’t* been a cue; that was now abundantly certain. In fact, with Sennlloy so deeply in love with one man, she probably wouldn’t be in the business herself at all . . . or would she? Were these people advanced enough — if you could call it advancement — different enough, anyway — to re-

gard sex-for-love and sex-for-improvement-of-race as two entirely different matters; so completely unrelated as not to affect each other? He simply didn't know. Data insufficient. However the thing was to go, he'd played along so far; he'd still play along. Wherefore, without any noticeable pause, he went on:

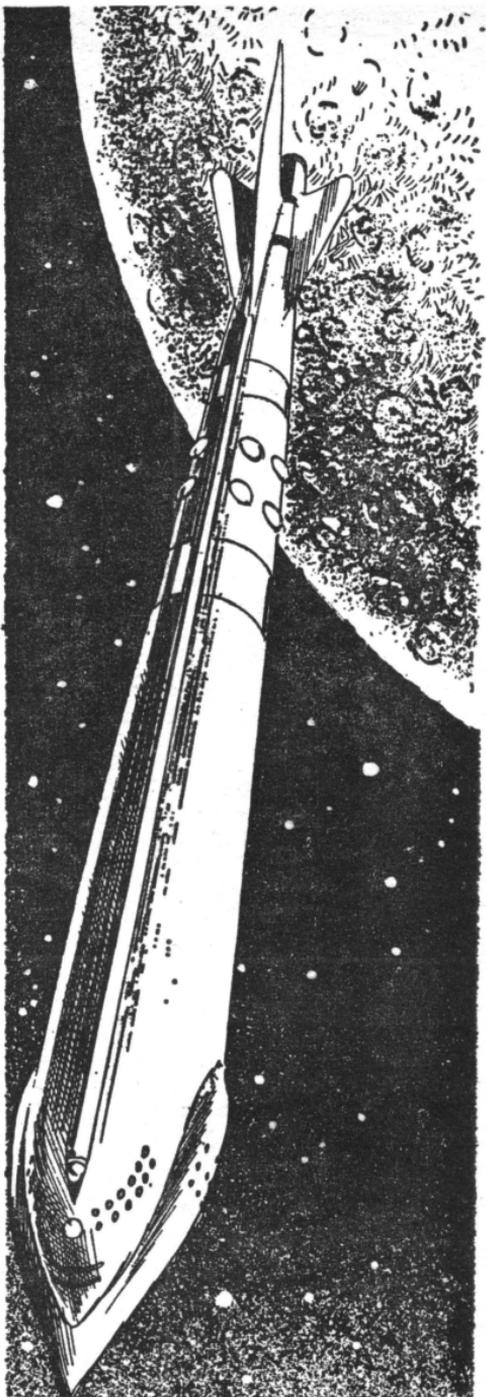
"I intended to comply with your conventions, but I'll be glad to use my own if you prefer. So I'll ask Tammon to flip me over to my own ship to put on my high-formal gear."

"Oh, no; I'll do it." Donning the helmet that had been lying on the beautifully grained oak-like top of the bureau, she took his left hand and compared his wristwatch briefly with the timepiece on the wall. "I'll bring you back here in... in how many of your minutes?"

"Ten minutes will be time enough."

"In exactly ten minutes from —" She waited until the sweep hand of his watch was exactly at the dot of twelve o'clock. "Mark," she said then, and DuQuesne found himself standing in his own private cabin aboard the *Capital D*.

He picked up shaving cream and brush; then, asking aloud, "How stupid can you get, fool?" he tossed them back onto the shelf, put on his helmet, and thought his whiskers off flush with the surface of his skin. Then, partly from habit but mostly by design — its richly masculine, heady scent was supposed to "wow the women" — he rubbed on a couple of squirts of after-shave lotion.



Opening closet doors, he looked at the just-nicely-broken-in trappings he had made such a short time before. How should he do it, jeweled or plain? She was going to be gussied up like a Christmas tree, so he'd better go plain. Showy, plenty; but no jewels. And, judging by that spectacular coverlet and other items in her room, she liked fire-engine red and gold. Okay.

Taking off his watch and donning one exactly like it except for the fact that it kept purely imaginary Xylmnian time — that had been a slip; if she'd noticed it, she'd have wondered why he was running on Tellurian time — he dressed himself in full panoply of Xylmnian finery and examined himself carefully in a full-length mirror.

He now wore a winged and crested headpiece of interlaced platinum strips; the front of the crest ridging up into a three-inch platinum disk emblazoned with an intricate heraldic design in deeply inlaid massive gold. A heavy collar, two arm-bands, and two wristlets, all made of woven and braided platinum strands, each bore the same symbolic disk. He wore a sleeveless shirt and legless shorts of gleaming, glaringly-red silk, with knee-length hose to match — and red-leather-lined buskins of solid-gold chain mail. And lastly, a crossed-strap belt, also of massive but supple gold link, with three platinum comets on each shoulder, supported a solid-platinum scabbard containing an extremely practical knife.

He drew the blade. Basket-hilted and with fifteen inches of heavy,

wickedly curved, peculiarly shaped, razor-edged and needle-pointed stainless-steel blade, it was in fact an atrocious weapon indeed — and completely unlike any item of formal dress that DuQuesne had ever heard of.

All this had taken nine and one half minutes by his watch — by his Earth-watch, lying now upon his dresser. The time was now zero minus exactly twenty-eight seconds.

XIV

Seeker Sevance of Xylmny

Precisely on the tick of time DuQuesne stood again in Sennlloy's room. He glanced at her; then stood flat-footed and simply goggled. He had expected a display, but *this* was something that had to be seen to be believed — and then but barely. She was literally ablaze with every kind of gem he had ever seen and a dozen kinds completely new to him. Just as she stood, she could have supplied Tiffany and Cartier both for five years.

Yet she did *not* look barbaric. Blue-eyed, with an incredible cascade of pale blonde hair cut squarely across well below her hips, she looked both regal and virginal.

"Wow!" he exclaimed finally. "The English has — not a word for it, but a sound," and he executed a long-drawn-out wolf-whistle.

She laughed delightedly. "Oh? I did not hear that on Tellus; but it sounds . . . appreciative."

"It is, Milady. Very." He took her hands and bowed over them. "May

I say, Lady Senny, that you are the most beautiful woman I have ever seen?"

"Milady.' 'Lady.' I have not told you how much I like those terms, friend Vance. I'm wonderfully pleased that you find me so. You're magnificently handsome yourself ... and you smell nice, too." She came squarely up to him and sniffed approvingly. "But the ... the blade of formality. May I look at it, please?"

She examined it closely, then went on, "Tell me, Vance, how old is your recorded history? Just roughly, in Tellurian years?"

This could be a crucial question, DuQuesne realized; but, since he didn't know the score yet, he hadn't better lie too much. "Before I answer that; you're a biologist, aren't you, and in the top bracket?"

"Yes. In English it would have to be 'anthropological biologist' and yes, I know my specialty very well."

"Okay. For better or for worse, here it is. Xylmny's recorded history goes back a little over six thousand Tellurian years."

"Oh, wonderful!" she breathed. "Perfect! That's what I read, but I could scarcely believe it. A young race. Mature, but still possessing the fire and the power and the genius that those accursed Llurdi have been breeding out of all us Jelmi for many thousands of years. They want us to produce geniuses for them, but they kill or sterilize all our aggressive, combative, rebellious young men. A few of us women carry all the necessary female genes, but without their male complements, dominant

in heredity, we all might exactly as well have none of them."

"I see ... but how about Tammon?"

"He's sterile, since he was a genius before he became a rebel. And he kept on being a genius; one of the very few exceptions to the rule. But since the Llurdi are insanely logical, one exception to any rule invalidates that rule." She glanced at the clock. "It's time to go now."

Walking slowly along the corridor, DuQuesne said, "Insanely logical' is right. I knew that there was a lot more to this than just an experiment, but I had no idea it was to put new and younger blood into an entire race. But with mothers such as you have in mind —"

"Mothers?" She broke in. "You already know, then?"

"Of course. I am sufficiently familiar with your specialty to know what a top-bracket biologist can do and how you intend to do it. With mothers of your class some of our sons may make genius grade, but what's to keep them alive?"

"We will." Sennlloy's voice and mien became of a sudden grim. "This fourth-dimension device that Tammon is going to give you was developed only a few weeks ago, since we left Llurdiac. The Llurdi know nothing whatever of it. When we get back to our own galaxy with it, either the Llurdi will grant us our full freedom or we will kill every Llurdi alive. And being insanely logical, they'll grant it without a fight: without even an argument, Sancil burn their teeth, wings, and tails!"

DuQuesne did not tell the girl how interested he was in the Lhurdi; especially in Llanzlan Klazmon the Fifteenth. Instead, "That makes a weird kind of sense, at that," he said. "Tell me more about these Lhurdi," and she told him about them all the rest of the way to the dining hall.

They went through an archway, stepped aside, and looked around. Three or four hundred people were in the hall already, and more were streaming in from all sides. Some were eating, in couples or in groups of various numbers, at tables of various sizes. Dress varied from nothing at all up to several spectaculars as flamboyant as Sennlloy's own. Informal, semi-formal, and formal; and the people themselves were alike in only one respect—that of physical perfection. DuQuesne had never seen anything like it and said so; and Sennlloy explained, concluding:

"So, you see, we eight hundred are the very pick of two hundred forty-one planets; which makes this an ideal primary situation. The reason I wanted you to look around carefully is that perhaps I should not be the only Prime Operative." She paused: it was quite evident that she was not at all in favor of the idea.

"Why not?" DuQuesne wasn't in favor of it, either; even though he couldn't begin to understand either her attitude or her behavior. How could any woman possibly be as deeply in love with one man as Sennlloy very evidently was, and yet act as she was acting toward such a complete stranger as himself? It

baffled him completely, but he'd still play along—especially since he was suffering no pain at all. "It won't make any difference in the long run, will it?"

"Of course not. I just thought maybe you would relish diversity," Sennlloy said.

"You can unthink it. I wouldn't. There's no tomcat blood in me—and remember what I said?"

"Do you think I don't? But you've seen some really beautiful women now. Much prettier than I am."

"You know what they call that technique in English? 'Fishing,'" grinned DuQuesne. "Prettier or not, Milady, you top them all by a country mile."

"I know about fishing. I was fishing a little, perhaps." She laughed happily and hugged his arm against her firm breast. "But it did get you to say it again, and it means ever so much more, now that you've seen the competition."

She steered him to a table for two against a wall, where he seated her meticulously—a gesture that, while evidently new to her, was evidently liked.

"You order," she said, handing him the helmet. "You invited me, you know."

"But I don't know what you like to eat."

"Oh, I like almost everything, really; and if there should be anything I don't like I won't eat it. Okay?"

"Okay," and DuQuesne proceeded to set the table with fine linen and translucent china and sterling silver and sparkling cut glass.

The first course was a thin, clear soup; which Sennlloy liked. She also liked the crisp lettuce with Roquefort dressing; the medium rare roast beef with mushroom sauce and the asparagus in butter and the baked Idaho potato stuffed with sour cream; and she especially enjoyed the fruits-and-nuts-filled Nes-selrode ice cream. She did not, however like his corrosively strong, black, unsweetened coffee at all. Wrinkling her nose, she sniffed at it, then took a tiny sip, which she let flow back into the cup.

"How can you possibly drink such vile stuff as that?" she demanded, and replaced it with a tall glass of fizzy, viscous concoction that looked like eggnog and reeked of something that was halfway between almond and lemon.

After dinner — DuQuesne wanted to smoke, but since no one else was doing anything of the kind he could and would get along without it as long as he was aboard the *Mallidaxian* — they milled about with the milling throng. She introduced him right and left and showed him off generally; especially to over a hundred stunning young women, with whom she discussed the "project" in American English with a completely uninhibited frankness that made DuQuesne blush more than once.

After something over an hour of this the crowd broke up; and as the two left the hall Sennlloy said, "Ha! We're free now, my Vance, to go about our business!"

Arms tightly around each other, savoring each contact and each

motion, they walked slowly and in silence to Sennlloy's room.

Three Mallidaxian days later, DuQuesne took his leave. Of Sennlloy last, of course. She put her arms around him and rubbed her cheek against his. "Good-by, friend Vance. I have enjoyed our association tremendously. Scarcely ever before has work been such pleasure. So much so that I feel guilty of selfishness."

"You needn't, Milady. That was exactly the way I wanted it, remember?"

"I remember with joy; and I have wondered why."

"Because you are the only one of your class aboard this ship," DuQuesne said.

"You said that, but still — well, I *am* the only Allondaxian aboard, which may account for our great compatibility. And there should be, as there has been, something more than the purely physical involved."

DuQuesne was very glad she had said that; it gave him one last chance to explore. "Definitely," he agreed. "Liking, respect, appreciation, admiration — you're a tremendous lot of woman, Milady Sennlloy. But not love. Naturally."

"Of course not. I have my love and my work and my planet; you have yours; it would be terrible for either of us or any of ours to be hurt.

"Our rememberings of each other should be and will be most pleasant. Good-by, friend Vance; may All Powerful Llenderllon guard you and aid you as you Seek."

DuQuesne's Assassins

Not even Marc DuQuesne was able — quite! — to put his rather astonishing, and totally pleasurable, experiences with the Jelmi — and with one Jelm in particular! — out of his mind without a second's hesitation. In another man, his mood as he set a minimum-time course and began to speed back to Earth, might have been called nostalgic... even sentimental.

But as the parsecs fled by his thoughts hardened. And just in time; for some very hard things indeed had to be done.

First and foremost, his deal with Seaton was utterly, irrevocably and permanently *off*. He no longer needed it. With the information he had received from the Jelmi, he had no further reason to worry about Seaton's offensive capabilities.

Of course, there was no reason for Seaton to know that. Or not until it was entirely too late to do Seaton any good. Let Seaton go on dawdling toward this Galaxy DW-427-LU. Seaton would be traveling at only normal max; DuQuesne would have time to make his arrangements, transact his business and *act* while Seaton was still on the way.

He did not intend to go to Earth, only to within working distance of it. Even so, he had a certain amount of time to spend. He spent it, all of it, in studying and operating the new device, which was called by the Jelm a name which Seaton had

told him corresponded roughly to "quad".

And immediately he ran headlong into trouble.

To DuQuesne's keen disappointment, the confounded thing was both more and less useful than he had hoped. More: Its range was enormous, much more than he had expected. Less: — well, it simply didn't do *any* of the normal things that *any* machine could be made to do. And he could not tell why. He had received too much knowledge too fast; it took time to nail down all the details.

He could send himself anywhere, but he could not bring himself back. He *had* to be at the controls. Remote control wouldn't work and he couldn't find out why not. The thing — in its present state of development, at least — couldn't handle a working projection; and he couldn't explain that fact, either. There was no way at all, apparently, of coupling the two transmitters together or of automating the controls — which was absurd on the face of it. There were job lots of things it couldn't do; and in no case at all could he understand why not.

That condition was, however, perfectly natural. In fact, it was inevitable. For, as has been pointed out, the laws of the fourth-dimensional region are completely inexplicable in three-dimensional terms. Obvious impossibilities become commonplace events; many things that are inevitable in our ordinary continuum become starkly impossible there.

Tammon had told DuQuesne just

that; Seaton had told him the same, and much more strongly for having been there in person; but DuQuesne could not help but boggle at such information. Of the three men, he was far and away the least able to accept an obvious impossibility as a fact and go on from there.

So Blackie DuQuesne, his face like a steel-black thundercloud, methodically and untiringly worked with his new device until he was quite sure that of all the things he could make it do, he could make it do all of them very well.

And that would be enough. Never mind the things it wouldn't do. What it would do would be plenty to get rid of Richard Ballinger Seaton once and for all.

Within range of Earth at last, DuQuesne set about the first step in that program.

The simplest and crudest methods would work — backed by the weird fourth-dimensional powers of the quad. And DuQuesne knew exactly how about recruiting the assistance he needed in those methods.

He launched a working projection of himself to the Safe Deposit Department of the First National Bank. He signed a name and counted out a sheaf of currency from a box. He then took a taxi to the World Steel Building and an elevator up to the office of the President.

Brushing aside private secretaries, vice presidents, and other small fry, he strode through a succession of private offices into the *sanctum sanctorum* of President Brookings himself.

The tycoon was, as usual, alone. If he was surprised at the intrusion he did not show it. He took the big cigar from his mouth, little-fingered half an inch of ash from the end of it into a bronze tray, put it back between his teeth, and waited.

"Still thinking your usual devious, petty-larceny, half-vast thoughts, eh, Brookings?" DuQuesne sneered.

"I didn't think that 'even you, Doctor, would have the sublime gall to show up around here again," Brookings said, evenly. "Even via projection, after the raw stuff you pulled and the ungodly flop you made of everything. Especially after the way your pal Seaton dragged you out of here with your tail between your legs. Incidentally, it took everything you had coming to repair the damage you did to the building on your way out."

"Stupid as ever, I see. And the galaxy's tightest penny-pincher. But back pay and the law of contracts and so forth are of no importance at the moment. What I'm here about is: with all these Norlaminian so-called 'observers' looking down the back of your neck all the time, Perkins' successor and his goon squads must be eating mighty low on the hog."

"We haven't any —" At DuQuesne's sardonically contemptuous smile Brookings changed instantly the sense of what he had been going to say — "work for them, to speak of, at that. Why?"

"So six of your best and fastest gunnies would be interested in ten grand apiece for a month's loaf and a minute's work."

"Don't say mine, Doctor. Please! You know very well that I never have anything to do with anything like that."

"No? But you know who took over the Perkins Cafe and the top-mobster job after I killed Perkins. So I want six off the top downstairs in the lobby at sixteen hours Eastern Daylight time today."

"You know I *never* handle —"

"Shut up! I'm not asking you — I'm telling you. You'll handle this, or else."

Brookings shrugged his shoulders and sighed. He knew DuQuesne. "If you want good men they'll have to know what the job is."

"Naturally. Dick and Dorothy Seaton, Martin and Margaret Crane, and their Jap Shiro and his wife — Apple Blossom or whatever her name is. Seaton's fast, for an amateur, but he's no pro. Crane is slow — he thinks and aims. And the others don't count. I'll guarantee complete surprise enough for one clear shot at Seaton. Anybody who is apt to need two shots I don't want. So — no problem."

"I'll see what I can do."

Since DuQuesne knew that was as close as Brookings ever came to saying "yes", he accepted it. "In advance, of course." Brookings held out his hand.

"Naturally." DuQuesne took a rubber-banded sheaf of thousand-dollar bills out of his inside coat pocket and tossed it across the desk. "Count 'em."

"Naturally." Brookings picked the sheaf up and riffled through it. "Correct. Good-by, Doctor."

"Good-by," DuQuesne said, and the projection vanished.

At four o'clock that afternoon DuQuesne picked up his goons — through the fourth dimension, which surprised them tremendously and scared them no little, although none of them would admit that fact — and headed for the galaxy toward which the *Skylark of Valeron* had been flying so long. The *Capital D* was of course much faster than the gigantic planetoid; and the actual difference in speed between the two intergalactic flyers was much greater than the rated one because DuQuesne was driving with all his engines at absolute max — risking burn-out, tear-out, and unavoidable collision at or near the frightful velocity of turnover — which Seaton of course was not doing. He didn't want to endanger the *Valeron*.

In the target galaxy — Galaxy DW-427-LU, according to Klazmon's chart — there was only one solar system showing really intense sixth-order activity. Almost all of that activity would be occurring on one planet; a planet whose inhabitants were highly inimical to (probably) all other forms of intelligent life.

Klazmon's side-bands of thought had been very informative on those points.

Thus it was by neither accident nor coincidence that DuQuesne came up to within long working range of the *Skylark of Valeron* well before that flying worldlet came within what DuQuesne thought was extreme range of a planet that Du-

Quesne knew to be a very dangerous planet indeed.

He had wanted it that way; he had risked his ship and his life to make it come out that way. When the *Valeron* came within range of the target planet she would be DuQuesne's not Seaton's. And DuQuesne was calmly confident that he and a *Valeron* re-tuned to his own mind could cope with any possible situation.

As a matter of fact, they couldn't. It was not, however, DuQuesne's error or fault that made it so; it was merely the way Fate's mop flopped. Neither he nor Seaton had any idea whatever of the appalling magnitude of the forces so soon to be hurled against Seaton's supposedly invulnerable flying fortress, the *Skylark of Valeron*.

Operating strictly according to plan, then, DuQuesne called his goons to attention. "You've been briefed and you've had plenty of practise, but I'll recap the essential points.

"Guns in hands. They'll be eating dinner, with their legs under the table. Sitting ducks for one shot. But for one shot only. Especially Seaton — for an amateur he's fast. So work fast — land and shoot. I'll give you the usual three-second countdown, beginning, now — Seconds! Three! Two! One! Mark!" and the six men vanished.

And in the dining room of the Seaton's home in the *Skylark of Valeron* six forty-five-caliber automatics barked viciously, practically as one.

VI

The Chlorans

While much work had been done on a personal gravity control, to provide for the comfort of such visitors as Dunark and Sitar, it was still in the design stage when the *Skylark of Valeron* neared Galaxy DW-427-LU. Wherefore, when the Skylarkers sat down to dinner that evening in the Seaton's dining room — that room was almost forty per cent undergrav. And wherefore, when DuQuesne's six hired killers fired practically as one, all six bullets went harmlessly high.

For, at low gravity, two facts of marksmanship — unknown to or not considered by either DuQuesne or any of his men — became dominant. First, a pistol expert compensates automatically for the weight of his weapon. Second, the more expert the marksman, the more automatic this compensation is.

And one shot each was all those would-be killers had. Dunark and Sitar as has been said, went armed even to bed; and Osnomian reflexes were and are the fastest possessed by any known race of man. Each of their machine pistols clicked twice and four American hoodlums died, liquescent brains and comminuted skulls spattering abroad, before they could do anything more than begin to bring their guns back down into line for their second shots.

The other two gangsters also died; if not as quickly or as messily, just as dead. For Shiro and his bride were, for Earthmen, very fast in-

deed Their chairs, too, flew away from the table the merest instant after the invaders appeared and both took off in low, flat dives.

Lotus struck her man with her left shoulder; and, using flawlessly the momentum of her mass and speed, swung him around and put her small but very hard knee exactly where it would do the most good. Then, as he doubled over in agony, she put her left arm around his head, seized her left wrist with her right hand, and twisted with all the strength of arms, shoulders, torso and legs — and the man's neck broke with a snap audible throughout the room.

And Shiro took care of his man with equal dexterity, precision, and speed; and of the invaders, then there were none.

Seaton was a microsecond slower than either the Osnomians or the two Japanese; but he was fast enough to see what was happening, take in the fact that the forces already engaged were enough to handle the six hoodlums and, in mid-flight, divert his leap toward the remote-control headset. He was blindly certain of one thing: It was Marc DuQuesne who had unleashed these killers on them. And

he was equally certain of that fact's consequence: The truce was off. DuQuesne was to be destroyed.

Wherefore what happened next astonished him even more than if it had occurred at another time.

A strident roar of klaxons filled the room. It was the loudest sound any human had ever heard — without permanent damage; it was calculated to come right up to the threshold of destruction. There was to be *no* chance that anyone would fail to hear this particular signal.

His hand on the headset, Seaton paused. The bodies of the six gunmen had not yet all reached the floor, but the other Skylarkers were staring too. They had never expected to hear that sound except in test.

It was the dire warning that they were under attack — *massive* attack — attack on a scale and of a persistence that they had never expected to encounter in real combat, with whatever forces.

For that klaxon warning meant that under the fierce impact of the enemy weapons now so suddenly and mercilessly beating down on them the life of the Valeron's defensive screens was to be measured only in seconds — and very few of them!

TO BE CONTINUED



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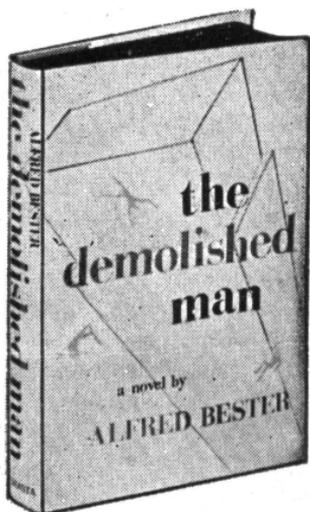
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