

# THRILLING WONDER STORIES

Vol. XXXII, No. 2

A THRILLING PUBLICATION

June, 1948

A Complete Novel

## THE TRANS-GALACTIC TWINS

By GEORGE O. SMITH

*On the eve of making the first spatial trip aboard the Star Lady, Barry Williams finds himself inhabiting another man's body on a strange and unknown planet!*



### Three Complete Novelets

- CONSULATE**.....William Tenn 56  
*The Martians send an expedition to Earth to collect specimens—and they pick up Paul Garland, storekeeper, and his buddy Fatty Myers!*
- AND THE MOON BE STILL AS BRIGHT**.....Ray Bradbury 78  
*When Jeff Spender stalks the hills and woods of Mars with his compatriots from Earth, he faces the fate of an idealist gone berserk!*
- A HEAD OF HIS TIME**.....Ray Cummings 92  
*Sanjan Thome, the radioactive man, seals his own doom when he makes a valiant effort to save the world from ultimate, fearsome disaster!*

### Short Stories

- WAY OF ESCAPE**.....William F. Temple 46  
*Stafford seeks surcease from worldly cares in another Universe*
- THE METAL LARK**.....Margaret St. Clair 71  
*Oona, woman of the future, decides to have the voice of a concert singer*
- THE KNOWLEDGE MACHINE**.....Edmond Hamilton 109  
*Pete Purdy and James Carter try an electrical shortcut to learning*
- SPACE-CAN**.....Murray Leinster 117  
*A routine visit to Ganymede discloses a deadly Martian secret*

### Features

- THE READER SPEAKS**.....The Editor 6
- SCIENCE FICTION BOOK REVIEW**.....A Department 144

Cover Painting by Earle Bergey—Illustrating "The Trans-Galactic Twins"

Published every other month by STANDARD MAGAZINES, INC., 10 East 40th Street, New York 16, N. Y. N. L. Pines, President. Copyright, 1948, by Standard Magazines, Inc. Subscription (12 issues), \$2.40, single copies, 20c. Foreign and Canadian postage extra. Re-entered as second-class matter October 8, 1946, at the Post Office at New York, N. Y., under Act of March 3, 1879. Names of all characters used in stories and semi-fiction articles are fictitious. If the name of any living person or existing institution is used, it is a coincidence.

PRINTED IN THE U. S. A.

# THE TRANS-GALACTIC TWINS

*On the eve of making the first spatial trip aboard the  
Star Lady, Barry Williams finds himself inhabiting  
another man's body on a strange and unknown planet!*



*An Amazing Novel by* **GEORGE O. SMITH**

## CHAPTER I

### *Broken Power Line*

**B**ARRY WILLIAMS emerged from the YMCA entrance, his head still damp from his swim in the pool. Outside, the heat of the August afternoon was like the torrid waves of heat from a fur-

nace. The stagnant air was soggy and the sun still glared upon the street into shimmering waves, making the sidewalk burn the soles of the feet right through the soles of the shoes.

One of the loungers on the YMCA steps looked up and nodded. "Hot, ain't it?" he said.

Williams nodded. "Hotter than," he answered grimly. "Almost better to be at work."

The other man agreed. "At least, at work you can get your mind off of it," he added finally.

Barry's cheer faded. "We've still got that problem."

"Not finished yet?"

"Nope," said Barry. "The *Star Lady* stands there, sort of champing at the bit to take off into interstellar space—but there's no one to put on the bridle."

"Better keep her there," said the other man. "No sense in taking off if you are almost certain to burn up in space."

"We'll lick it," said Barry. "Some day. I hope it is within my lifetime. I'm slated to go, you know."

"I don't know whether you're lucky or not," said the loungeur on the steps. It's mostly a matter of opinion, I guess. Your meat, Barry, is my poison." At which the loungeur's eye caught sight of a pleasant girl in a printed silk. She kept his attention for moments.

"Nice," he said as she passed out of sight.

Barry nodded.

The loungeur looked up in astonishment. "Yet you'd leave gals such as she?" he said. "Barry, are you sure you want to go off into space for a couple of years?"

Barry lifted one eyebrow, looking back at the now empty corner as though the corner had been somehow altered by her passage near to it.

"Uh-huh," he said absently.

**S**LOWLY Barry left the YMCA and continued on down the street. The loungeur on the steps turned to a half-dozing companion and said:

"Old Books begins to sound human."

His companion stirred. "They all fall sooner or later," he said laconically.

"I wonder what's the matter with him."

"Look, sport, there's men and there's men. Barry never really got interested in women. You are. Ergo, neither of you see eye to eye on the subject. I predict that eventually you'll both end up married, reasonably happy, and raise families."

"Morbid thought."

"Well, you have too many irons in the fire to settle to one, and Barry has too few to know. But don't think that because he doesn't go overboard at the rustle of a skirt

that he might not have what it takes."

They both looked down the street at the retreating figure.

Barry was walking with a long stride, his mind working on the problem of keeping the atomic engines from consuming themselves once they reached the critical level of output. That danger point was only a twelve percent or so above the output required to drive the *Star Lady* into interstellar space at a velocity that made such travel practical.

A cluster of motor vehicles awaited the change of the light. A street car was poised at the intersection, and a traffic cop stood on the curb, watching the cross traffic.

Barry came up to the curb and stopped. He decided then to cross with existing traffic and made the change in his course. It put him outside of the lane of walkers, all alone on the point of the curb. He stepped into the street, and at that instant he caught the eye of a passing motorist.

The man's face was starting to register fear. His mouth was opening to shout. The car was starting to go out of control. The man's eyes were staring fixedly above Barry's head, with bulging, terrified eyes. This registered on Barry's mind in the camera-shutter instant of an eye swing.

Barry's head continued on around and his glance fell on the face of a girl in the street car. Her hand was approaching her throat and her chest was raising in a tremulous intake of breath. Fear distorted her perfect lips and had whitened her face under the make-up.

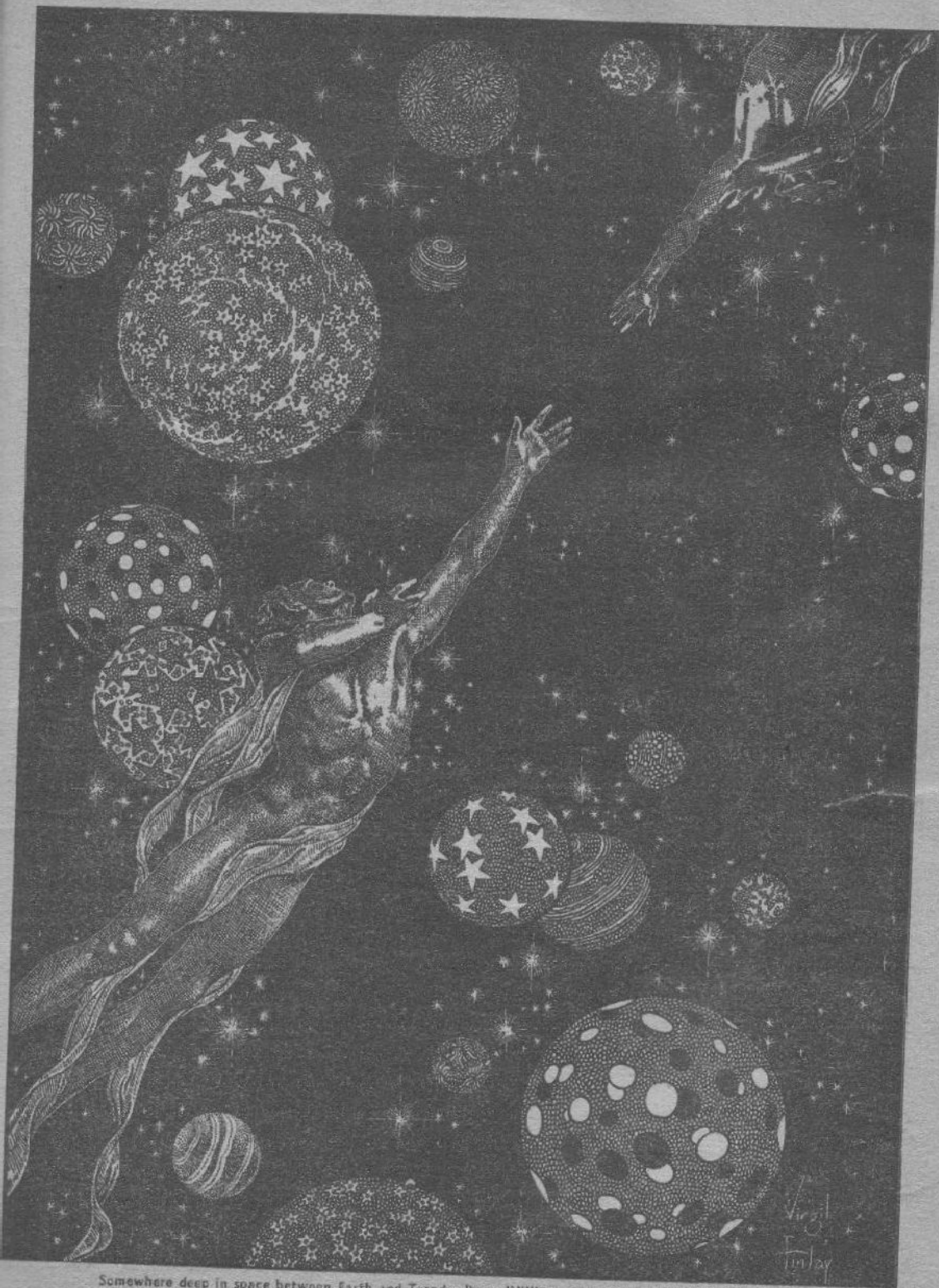
Not many steps away, the traffic policeman was turning toward Barry, the instinct to protect a citizen coming to the fore. His mouth was opening, too, and Barry noted swiftly that in another instant there would be a volley of shouts. As Barry's head continued to turn, he saw that all eyes were staring fixedly at some spot above his head.

He looked up and saw a dangling high-tension wire swinging down from a fresh break, the free end heading for the top of his still-damp head.

Terror came.

And Barry's muscles fought against the inertia of his mass to get him into motion. In maddening slow-motion, he started to move away, but it was not enough.

Down upon his cheek fell the ribbon of copper wire. It was slightly greenish-black from the corrosion of rain and smoke, he saw, excepting the broken end, which was a



Somewhere deep in space between Earth and Tredda, Darryl Williams encountered Jehntha (CHAP. IV)



copper-frosted area of crystallization. It landed.

\* \* \* \* \*

Awareness came, a basic, unsatisfying awareness of time and space only. Time, in eons, and space in unthinkable infinities. Universes passed and they were swirling galaxies, a riot of moving color because his time sense was racing madly.

Then awareness of self came, and a wonder of how and why.

**H**E SAT up, feeling the luxury of a soft bed and knew that he had been taken care of.

"He's coming around," said a voice. It was a throaty voice that stirred an inner pulse with a vital urge to awaken swiftly, to break the bonds of this illness, to recover his youth and his virility. He did not recognize the urge, but he followed it.

"What happened?" he asked. Shaking his head he cleared his mind and to show his true grasp of the situation he added: "I mean after the car-line feeder landed?"

"Car-line feeder?" asked the throaty voice.

"Delirious," said a pleasant male voice.

"I am not in delirium," state Barry flatly.

"Hallucinations?" asked the throaty voice.

Barry turned and looked at the young woman who sat upon the side of the bed holding his hand.

"Do I sound delirious?" he demanded.

She smiled. It was a bright smile that illuminated the room according to Barry's idea. She was small and dark, with laughing eyes and a wide, good-natured mouth. She sat on the edge of the bed with easy familiarity, swinging one shapely leg that just missed the floor from the high hospital bed. On the other side stood the doctor, an elderly man with a face that showed the wisdom of long years of experience.

The girl answered him: "It is hard to tell." She laughed.

"Vella means that you often sound less lucid when completely in possession of your wits."

"You're Vella?" asked Barry. "Vella who?"

She looked at the doctor. The medical man blinked as though this defied his prognosis completely.

"You speak with lucidity," said the doctor. "You ask intelligent enough questions though about an event of which we know nothing—even of its meaning—and demand

whether we think you in delirium. We are about to say we think you cured, and then you profess ignorance of Vella."

"Why should I know Vella?" demanded Barry. "I've never seen her before." He looked at her shyly and then with an inner boldness, he squeezed the hand and said: "An egregious error that I shall rectify."

"Are you fooling us?" asked Vella, pleadingly. She returned the squeeze, which made Barry's pulse skip a beat. "Johntha, are you having fun at our expense? Please, this is no time to play. You've been through enough already."

"What did you call me?" he asked.

"Wha—" she started to echo.

"Johntha," said the doctor.

"Are you sure you have the right party?" asked Barry. "I'm not this Johntha. I'm—I'm—"

Barry stopped aghast. He knew his name. He knew it well. It was on the tip of his tongue, but it stalled.

Because the name was meaningless!

## CHAPTER II

### *New Environment*

**R**EALIZATION of a great and drastic change dawned suddenly upon Barry Williams. The discovery numbed him, frightened him. It was some time before he could force his stiff lips to speak.

"Where am I?" he demanded.

"Johntha— If you are not Johntha, then who are you?"

"I know, but the words have no proper syllables," said Barry hopelessly. "My tongue will not form them. It is as though the words were never uttered before."

"Partial amnesia," said the doctor. "With a willingness to face it. That helps, Vella. Perhaps we can complete the cure right now."

"Cure of what?"

"You were a victim of neurophasia. Complete loss of capability. You've been here for a long, long time, Johntha. So long I dare not mention any real terms. Vella came daily, hoping to help. Miraculously, you seem partially cured."

Vella put her free hand on Barry's shoulder. "Johntha, help us? We can cure you.

But not without your help."

"Vella, maybe I am suffering from a long-term mental illness. I—would hate to try and determine the truth of life, whether I am awake or dreaming at any instant. I don't recall you, ever. I'm sorry that I do not, if I should." He smiled. "I shall try to correct that, and make up for the error with all my heart. I do not recall you, Doctor."

The doctor smiled. "I am Kendon."

"Doctor Kendon?"

The other man nodded strangely.

"Now, to complete the record," said Barry, "who am I, where am I, and what happened?"

"You are Johntha. You've been working on a method of sub-etheric communications. You are, of course, on your home planet. While working, you became stricken and they brought you here where you've received the best of care because interplanetary communications are still suffering under the limitations of the speed of light, and you probably know more about the subject than any other physicist on Trenda—or in the whole system, for that matter."

"Trenda?" echoed Barry hollowly. "Where's—where's—" But the word "Earth," like the words "Barry Williams" refused to be formed by his lips.

"Johntha, what happened to you?"

"I was struck on the forehead by a falling high-tension wire," said Barry. "One of the car line feeders. It came down and hit me. That's all I remember before I awoke here. Previously, I'd been working on a means of keeping the atomic engines from eating themselves up. The *Star Lady* is about ready, save for one factor, you know."

"Interesting," murmured the doctor. "You, of course, recall details of this interstellar ship?"

"Certainly," said Barry, and went on to describe it roughly.

"A complete hallucination, with a finiteness of detail and almost perfect rationalization. You'd almost think the thing would work."

"It will and does," stated Barry. "We made test-flights in it."

The doctor shook his head.

"Look, Dr. Kendon, the newspapers have been following this thing for years. They've even mentioned my name—" and again that blankness came, that refusal to form the proper syllables. "You read papers?"

"Yes, but nothing of this nature has ever

been mentioned. By the same token, Johntha, you claim you do not recall me?"

"Not at all."

"Nothing of the front-page articles on my classic spinal operation on Anthree?"

"Who is Anthree?"

"Complete amnesia," said the doctor. "Doesn't remember Anthree either."

**B**ARRY pressed his forehead. "All these names are strange. They are as unaccustomed to my mind as my own name is unaccustomed to my lips. But wait—I might form the syllables. I'm—Baris—Varry is about as close as I can come to the first name. The second name is Wiayoms, Welloms, Walyahms. Make it Varri Wallyamze, I think."

"A strange name," said the doctor. "Completely alien."

"You like it?" asked Barry of the girl.

"It is interesting," she said. "So long, and complex."

"Simple, I've called it."

"Not as simple as Vella," she said.

"Not at all," he said. "But though the name comes easy to my lips, it is alien to my mind."

Then he blushed and looked up into her eyes. He said uncertainly, "How am I related to you?"

"Why, I'm your sister!"

"Oh," said Barry, and he felt crestfallen. "But I have no sister."

"Haven't you?" she asked.

"Not that I've ever known."

The doctor grunted unhappily. "I think this has been enough," he said with finality. "We'll return tomorrow morning. Vella, you come along. I want to talk with you."

Vella nodded, and then leaned forward and gave Barry a sisterly kiss that was quite unsatisfying to the young man.

"We'll be back," she promised.

Barry looked around the room in a puzzled fashion. "I'll be here," he said with humor. "And if I'm not, I'll be back. You see, Vella, I have no sister!"

Vella laughed, and then became nervous at the intense look on Barry's face. She was a little glad to leave. After they went, Barry thought for a long time. There was obviously something completely wrong here and he was not yet certain what it was. He began to doubt himself.

After all, he had to accept the medical statement that he had been ill. Perhaps all

that work on the *Star Lady* had been a dream of amnesia. Maybe his name really was Johntha, and the all of his life for the past twenty-seven years was a false belief, painstakingly built up over a period of years, complete with false memory supplied by a mind that was hiding from the truth.

That was entirely possible, for he had heard of such cases. Amnesia and such mental ills were actually what happened when the mind went into hiding from an unpleasant future.

Barry wondered why. Even to—the building of a completely new personality. He'd never felt the twinge of heart over a woman before, but he was feeling slightly warm inside from the thought of Vella.

But he that as it might be, there was still something wrong. More than merely his "amnesia." That might be mind-hiding, but there was much more that he did not grasp. If his previous life were a myth, then Earth was non-existent. So was the *Star Lady* and the YMCA and the hope of interstellar travel. And instead of trying to reach the stars, he had been trying to communicate between the several inhabited planets by subradio. Did he know anything about sub-etheric wave propagation?

He found the answer slowly, haltingly. It was like the slow memory that came from re-reading a book that had once been read and almost completely forgotten. He had to reach every point, and yet was prepared for the next point before he came to it, yet he did not recall the entire problem as a whole.

Yes, he knew about sub-etheric wave propagation. The force fields and the barrier potentials and the wave mechanics all came to him one after the other.

**H**E SAT up in bed with a quick cry, only to lie down again unhappily. For the force fields and the barrier potentials would be the proper answer to the problem of keeping the atomic engines from burning themselves out! But—the *Star Lady* was only a dream.

Or, his mind asked shrewdly, Was this the myth?

Which was which?

His brain whirled. If this were myth, Vella was not real, and he felt a long-term attraction for the girl. He did not want to lose her. If Earth and all were but myth, then he himself was Johntha and Vella's

brother and the long-term attraction merely a brother-sister relationship and could be nothing more. He recognized both lives, now. And if he never returned to that Other Life on Earth, he'd ponder the weight of his own mind.

The problem came more clearly. How could he be sure?

Night came, bringing a double moon, which he seemed to recognize. And when the stars emerged, he called them off into constellations which were nothing like the constellations he knew from his—well, was it really a myth-life?

Then he grinned. Barry Williams or Johntha, and whichever life he entered from here on in, he hoped he'd remember the details of the *Star Lady* in one life or the sub-etheric wave mechanics in the other one. They'd be mutually interesting. And supposing both lives were myth, somewhere the stuff should come in handy.

He drifted off to sleep and he dreamed of a vacant place, filled with whirling vortices of intangible forces that did nothing but whirl and whirl and whirl.

## CHAPTER III

### *Second Interchange*

**V**OICES awakened him. Johntha opened his eyes slightly, and peered from beneath half-lowered lids. A white clad doctor and another man were standing beside the bed.

"Electricity does perform freaks," admitted the doctor, looking down at Barry Williams' quiet body. "Why he isn't dead I'll never know."

"He's coming out of it, Dr. Edwards?" asked the other man.

"Yes. He'll be all right in a few hours. Who did you say you were?"

"Jim Evans. Gosh, I was sitting on the YMCA steps talking to him just a minute before."

"I think perhaps your swift action may have helped. You didn't waste any time."

Jim Evans smiled in an abashed manner. "I was once a Boy Scout," he suggested helpfully.

"A first-class one," said the doctor succinctly. "No one but a good man would have

known what to do."

"Look, he's stirring."

The doctor filled a hypodermic and drilled Barry's arm with the needle. "That'll help," he said, stepping back to watch the awakening.

"Awake?" muttered the man on the bed.

"Am I awake?"

"Certainly," smiled Doctor Edwards.

"And you can thank your friend Evans for it, too."

"Evans? Do I know an Evans?"

"Not too well," admitted Jim. "But well enough to talk to."

"Um. What did he do? I've always been told that neurophasia was incurable."

"Not familiar with that one," said the puzzled doctor, discounting it as a warped pronunciation due to medical ignorance on the part of the untrained patient. "You did have a bit of luck, though. You got tapped on the head with a five-hundred-and-fifty-volt car-line trolley feeder."

"A what?"

"A car-line feeder. They run heavy cables alongside of most trolley lines to supply the trolley wire itself, you know. One of them dropped on your head. Should have electrocuted you. Instead, it merely stunned you."

"I'm not certain of the meaning of 'car-line,'" said the invalid. "You say it stunned me? Perhaps it cured me."

"Of what?"

"Some time ago I fell ill with neurophasia and fought against it right to the point where I went under. Instead of dying, I now feel much better—almost completely cured, I'd say."

"Mind telling me what you were doing all this time?" asked the doctor.

"Why, I've been working on a means of interplanetary communication on the sub-etheric level."

The doctor looked at Jim Evans. Jim shrugged. "I've heard of such. But mostly its strictly double-talk, when applied to anything practical. There have been a few highly controversial papers presented before the Terran Physical Society on the theory and so-forth of such. It's like mental telepathy right now. No one has been able to prove it exists to the satisfaction of every one, but no one feels firm enough to stand up and say it does not exist because 'No, no,' has all too often been followed immediately by someone then demonstrating the idea in practise. Me, I'm an electronics engineer and I'd like to



Johntha was still struggling as Dr. Edwards thrust a hypodermic into his wrist (CHAP. VII)



know more about such."

"I can imagine!" said the doctor. "Barry, can you give any details on this sub-etheric stuff?"

"I think so," said Johntha, and gave a rather sketchy picture of the complete sub-etheric wave mechanics.

**D**OCTOR EDWARDS looked at Jim Evans helplessly. "I'm a physician, not an engineer. It does sound plausible."

"It is either strangely plausible or someone has gone to a lot of trouble to build up a sophistic science. But it sound too pat for a fake."

"I don't know," said the doctor. "I've known men who were mentally avoiding something that could build an entire false memory to erase a terrifying period from their minds."

Johntha looked up at the doctor. "You called me—?"

"Barry Williams."

"I am not. I am—ah—"

"Who?" prompted Doctor Edwards.

"Strange—strange. It as as though the words and syllables of my name were alien. As though, for instance, someone were asking me to pronounce a name in some tongue that included a—raspberry—sound as a common syllable. I cannot pronounce my name, though the name of this Barry Williams comes to my mind easily and I can say it clearly. Are you certain that you have the right man?"

Jim Evans smiled. "They can't tag me with losing the body," he said with a grin. "When that wire started to fall, I leaped off of the Y steps and headed for you. I gave you artificial respiration until they called the ambulance and then I rode with the boys in back until we landed here, and I've had you in my sight ever since. Period."

"You claim that you were speaking to me and knew me before the accident?"

"Definitely."

"And what was the conversation?"

"The heat, a common topic. Then we discussed your work, which was not on communications but on the atomic engines in the *Star Lady*. Then we discussed women—a usual ending among men of intelligence."

The doctor grunted something about it not being restricted to any age, intellect or environment.

"I do not remember," said Johntha with a smile. "What was said about women?"

"Nothing much. You are usually too busy to notice them."

"There's a conflicting note there, somewhere," said Johntha. "I don't believe I've been like that always."

"We've been on the *Star Lady* project for about four years and you've been no different."

"*Star Lady*?"

"The interplanetary ship."

"Never heard of it. Really, now. The possibilities of interplanetary travel are in about the same state of the art as you've recently claimed interplanetary communications to be. I know your statements are not true."

"And we suspect yours," said Jim Evans. "Though I'm going to look into them myself."

"I'll show you the way."

"Thanks," said Jim drily. "You've never professed anything but puzzlement over the subject up to now. Did that electrical whap on the bean screw up a neurone or two?"

"I'm wondering. I'm wondering who am I. Or, if what Doctor Edwards says is true, what am I hiding from."

"I wouldn't worry," said the doctor calmly. "Electrical current does things to the mind, we know. It will clear away. Give it time—and we're going to give you time. I'll have the nurse give you a shot that'll let you rest. We'll be back in the morning. Perhaps you'll be feeling less confused in the morning and we can figure out what's going on."

Johntha nodded.

**O**NCE outside, Doctor Edwards said to Jim Evans: "Hallucination. The electrical shock has crossed up his memory momentarily and has given him a completely false replacement for it."

"That's difficult, isn't it?" wondered Jim Evans. "A complete memory?"

"Not at all. No memory is either complete or chronological. When the mind finds itself required to produce a memory in order to prove itself sane, it will produce very nicely. Electrical shock has fouled up Barry's memory badly. Yet his mind insists that the good, logical memory of the man's experiences be reproduced or shown as evidence of his sanity. The fact that real memory was either destroyed or—snowed under, say—for the moment makes a logical reproduction impossible. Ergo, the insistence on this new life

and new theories. Such can be done with lightning swiftness. Comes tomorrow and the initial glimmerings of real memory will come up through the mental threshold and he will then mend swiftly."

Johntha heard and agreed, in part, that what the doctor said might well be true. This was strangely terrifying, to have your own memories, so vivid, so clear, refuted by people of certain authority.

Were he not speaking their language perfectly, he might suspect that he had become another person, on some alien planet, rotating about an unknown sun in a strange galaxy. Or had this happened?

Johntha stopped thinking; for this new line of reasoning might be a line of unreasoning used to explain why his memory and his life obviously did not jibe.

He hoped the doctor did not know that he had overheard. Yet, Johntha wondered whether the doctor had spoken loudly, knowing the explanation coming from the medical man would tend to explain his mental trauma better than his own unaided mind. If he could recall some of the things he was supposed to have been working on, he would be convinced.

Atomic engines, burning themselves up because the critical power level was too close to the operating energy of the interstellar drive. Yes, he recalled some of it vaguely, falteringly, but with the solidity of foundation, or building in which each new brick is a matter of conquest and uncertainty until it is installed, but then to become firm and logical. Bit by bit and detail by detail, he built up his atomic theory until he recalled it all.

His memory of this work confirmed his suspicions. Whatever he might have believed, it must be like the too vivid dream that starts upon the clang of a chime and builds up backwards, actually furnishing a memory of events leading up to the ringing of the chime and explaining it with clear logic based upon an error.

He—must be—Barry Williams.

The thought of the alien mind-transfer returned briefly. Supposing that he had been that. He spoke with the men of this planet. Logically, he was using a body and a mind really trained in thought and speech to their ideas and customs. His inability to form, properly, the name of his supposed entity might be due to the alien quality of the sound.

More self-justification, he thought.

A momentary question passed his mind. Bodies! Then he laughed. If he were alien mind in normal body, inspection of the latter would show nothing. For, which was mind and which was memory and which was thought? Knowledge, memory, thought, ideas, who really knew? Was knowledge and mental sharpness a matter of the extrapolation of experience? How then could it possibly be that a mind could enter another—brain—and recall, if the mind and the brain were one?

Who could know?

Johntha inspected the symbol for which he could find no syllables, and decided that the doctor was right. He must put aside any thoughts of—of—that planet. They must be false.

He slept, finally. It was the dreamless sleep of a man who had made up his mind that the moment was right, and that memory was faulty, but could be corrected in the morning. Nothing invaded his mental privacy, for Johntha, accepting the name Barry Williams, did not dream.

His final thought was pleasant, for the idea of interstellar travel was infinitely more interesting than mere high-speed interplanetary communications. He thought that he could have both, for from the quick scanning of the problem of Barry Williams, a solution of his difficulties had occurred to him.

If the barrier potentials and the force fields he dreamed of were of any logic, he could solve the problem of the atomic engine.

---

## CHAPTER IV

### *Meeting In Space*

---

**A**LTHOUGH their separation in distance might have been anything from a few mere light years to a hundred megaparsecs and there was no way of determining the distance, Barry Williams and Johntha slept simultaneously.

How fast is the propagation of thought? One can think about, really contemplate, Sirius and his dark companion without a wait. One may visualize in his mind the shape and size and distance of the Spiral Nebula in Andromeda, far outside of our galaxy. Thought, therefore, must propagate

at an unthinkable velocity. Projected minds must move at this speed, for the mind is but a focal spot for thought.

The men slept dreamlessly for many hours. They rested both their minds and their bodies, and when both were rested, they encountered, not a dream, but mental actuality.

Out of the whirling vortices of nothing that filled Barry's mind with a faint unrest, there came a wisp of something he knew.

Call it coincidence, but in all the universe of minds, these two were attuned closely enough to meet once the unknown stimuli had been applied. Somewhere in the deep of space between Earth and Trenda, the minds encountered one another and recognition came.

"You are Barry Williams."

"I am. And you are Johntha."

This was not speech. This was more than speech. This was dual thinking with each mind in turn drawing the other along in perfect track as it formed its thoughts, and then following the other as the answering thought-pattern demanded understanding.

"What happened?"

"I was struck by high voltage."

"I was a victim of neurophasia."

"At the same time."

"We—have changed minds."

"It is very vague. Then there is an Earth, and my memory of a long and happy life there is not false."

"It is no more false than my own memory of Trenda. Tell me when you awoke—was Vella pleased?"

"She was. Though she and her doctor friend were dismayed at my inability to remember them."

"You find my sister—attractive?"

"I do. You are a lucky man."

"To have an attractive sister? Perhaps so."

"I see your reasoning."

"Barry Williams, we may return to our own bodies at this instant."

"I know, and I am puzzled."

"I am not. I do not care. If any, I would prefer to remain upon Earth. I can study interstellar traveling and I find that it offers more interest than communications. Your mind is filled with the knowledge of atomics, and though I find trouble in recalling the factors of sub-etheric wave propagation, the subject is not a complete blank. It will come to me."

"I find that I know much more about that than I know about the atomic engines." This was in mental complaint. "Yet unless I understand the sub-etheric, the atomic engines will never be safe to use at interstellar speeds."

"Then what do you plan?"

"I would prefer to learn."

"As I would."

"Yet unless we return to our own bodies, we may never have an opportunity like this again."

"I know. Yet I have no ties to bind me to Earth."

"Nor have I a great desire to return to Trenda. My only great tie there is my affection for Vella. That seems to be in good hands."

"That I swear—"

"You need no protestation. I see your mind."

A GREAT peace welled up in Barry Williams' soul. He said: "Yet it is a problem that I must solve. If I remain on Trenda, I may learn the answer to the atomic engines and sub-etherics. We, I should have said, I—would court Vella. Where is Trenda with respect to Earth?"

"Who can possibly tell. There are a million million stars."

"If I return to Earth, then, what are my chances of retaining the rudiments of the sub-etheric level?"

"Remote. Using your mind, I know atomics. I recall vague inklings of sub-etherics because I was trained in that field. The thought-pattern is like a pre-formed mold which tends to warp into that pattern though now conforming to the new shape. Similarly, your atomic-trained mind is superimposed upon my sub-etheric experience. If we return, the minds will be immediately re-molded into their intrinsic patterns and nothing will remain."

"Then to achieve interstellar flight I must remain on Trenda, where I may work as though I were really Johntha. I may accept only the sisterly affection of Vella."

"You will not achieve interstellar flight. I, as Barry Williams on Earth, will do that. You, as Johntha on Trenda will achieve interplanetary communications of conversational rapidity."

"And if I return to Earth, interstellar flight may never be achieved?"

"Correct."



"You know what I would prefer to do?"

"Of course. You would like to return to your own body on Terra; you would like to solve interstellar flight; you would like to find Trenda; and finally you would prefer to meet my sister as a man who would be permitted to strive for her affection."

"Precisely."

"It is unfortunately impossible."

"I know. Regardless of any act I may perform, Vella is beyond my reach. If I remain on Trenda, I am her brother. If I return to Earth, we may never solve the atomic problem in my lifetime, and most certainly will never find Trenda when and if we do. Since my own first desire is impossible, it must be discarded. My second desire is to see men achieve interstellar flight. Only by sending you back to Earth as me can that be done. It is important. Therefore, Johntha, return to Earth and take men to the stars!"

Johntha, the Trendan, radiated admiration for him who would put aside his personal ambition to see and do and go for the sake of having it done perfectly by another. With no more than a mental "Luck, Barry Williams, and may we meet again," the Trendan's mind withdrew and was gone. He had returned to Barry Williams, atomic specialist.

With a wistful thought of what might have been, Barry Williams returned to Trenda to become Johntha, an expert in communications which he was not particularly interested in, and a brother to Vella whom he was definitely interested in, but which interest he must destroy.

His withdrawal into Johntha's own mind was simultaneous with his awakening. There was breakfast and beside the bed-table sat Vella.

"Hello," she said brightly.

"Good morning, Vella."

"Feeling better?"

He nodded. "I want to get to work," he said.

"So soon?"

"It's been long."

"About a year or more," she admitted.

**H**IS Terran memory compared the two and made the observation that the Trendan year was slightly longer though the daily period was slightly shorter and therefore there were considerably more days in the Trendan year in the Terran year.

"Too long."

"Not so very," she said brightly. "Your

assistants are still studying your developments. None has matched you. We've just lost a year of development."

"I know," he said. "It is less important that someone surpass me in that year than it is to know that a year of zero advancement has passed. I would have preferred to know that great progress has been made." He smiled. "On the other hand, it is gratifying to my ego to know that, despite a year's complete illness and inability, I am still top man."

"May I quote that?"

"Nope," he returned cheerfully. "That is something for me and thee alone."

"A state secret?"

"Very."

"I'll tell no one," she said with a laugh.

Then Vella sobered again and she looked at him wonderingly. "Doctor Kendon tried to recite your atomic theories to a couple of specialists last evening. They were quite puzzled, for your ideas follow a different track than the usual. Yet they admit that there might be something in it."

"Would you try to get me a couple of books on atomic engines?" he asked.

"Certainly," she answered quickly. "But Johntha, is there really something to the superspeed drive?"

"There is, but a few of the factors elude me at present. I must brush up before my ideas will take form."

"Funny," she smiled. "You've never showed an interest in atomics before."

"I'm a different man," he said.

"Oh, not so different," she told him. "You're still my brother."

That was the trouble. He finished his breakfast heartily, to the gratification of both Vella and the nurse who finally came to remove the tray. He was told that until this morning he had been spoon-fed.

Doctor Kendon came after the breakfast tray was gone and went over Johntha's body with a critical eye.

"Amazing," he said, watching the knee-reflex. "Completely dead yesterday, and today it is as alive as ever. I pronounce you cured," he said. "Though I'll never know how it happened."

"May I leave and get to work?"

The doctor nodded slowly. "You may leave any time," he said. "I'd suggest that you spend a day or so resting and regaining your strength. You might go back to work in a few days, though take it easy at first."



Johntha looked at Vella. "Outside," he ordered with a grin. "I'll see you after I'm properly dressed."

She nodded and left.

## CHAPTER V

### *Scientific Savants*

**M**ECHANICALLY Barry's mind let Johntha's trained body insert itself into the unfamiliar clothing of the Trendan. As with the paradox of the speech, Barry doubted at the present time whether he could speak any Earthly speech at all without a hard struggle. The words spilled from his Trendan mouth in the proper order to convey the thought generated in his Terran mind and transferred to the Trendan brain.

He was, he admitted, more of Trenda than of Earth. So Johntha's body was the outlet of Barry's mind, and though the mind thought in Earth language, the physical output was instantly transposed into the Trendan analogue.

There was an instant of foolish speculation on the fact that Johntha's clothing fit so well, but it was merely the product of his own mind, forgetting for the instant that this was not a case of being an impostor, a substitution. This was the masquerade perfect. The clothing and the life and the experiences of Johntha were his and valid.

Only the sentience, the personality, the ego, had changed and had taken with it the necessary bits of its own experience to maintain its own individuality. Perhaps, he thought, if my mind retained no memory of past experience on Terra, I would truly be Johntha.

The old question: "What is that which is I?" came up to confront him, and he smiled, for the ancient philosophers had propounded it and no answer had come forth over thousands of years of deep pondering. He gave up, for if men trained in studying the ego and the mind could not answer, it was far past him.

He finished dressing and the doctor and he met Vella in the hallway.

"I've no other patients to take my time," explained the doctor. "The problem of Johntha's false memory is of sufficient interest to have all my other cases transferred. You are

now my only study."

Barry nodded. This was an interesting custom on Trenda that might well be applied on Earth, or "Terra," as it was sometimes called. Doctor Kendon would lose no income by it, and the entire medical history of the system would benefit.

"I prefer to study you under familiar surroundings," said the doctor. "We're going to your home. I am, unfortunately, not an expert on atomic theory. I could not evaluate your statements of last evening. What little I recalled, I used in consulting with Physicist Tharmane, who seemed puzzled but very interested."

"I hope it is not too puzzling," offered Barry.

"So does he," said the doctor, and then he dropped the subject.

Once on the street, Barry's mind let Johntha's body lead him unerringly to the little vehicle. He did not try to drive, which seemed quite all right because Vella slipped beneath the wheel beside him. The doctor climbed into the back seat and Vella started off into traffic.

Defly she wound the little car through the maze of streets and other cars, often stopping for traffic signals and making difficult turns through conflicting streams of otherwise-bound vehicles. The tall spires gave way shortly to open country, and the roads that led from the commercial cluster of tall buildings diverged across a rolling prairie.

Close to the building cluster, the other roads leading from the other terminating streets could be seen, but they fanned out radially and soon were lost behind the hills and the distance. Tiny side-roads led from one side or the other at considerable distance apart. These wound in among the small rolling hills that occasionally showed a small house-top.

City life was not known; the cities were only collections of commercial buildings. Residences were entirely suburban.

Then, eventually, Vella swerved off to the left and wound along the small rustic road past several dwellings to their own. It was set in a grove of trees, a complete little haven of itself.

**I**T WAS all so very familiar, and Johntha's own key, selected unerringly from the keyring, opened the door.

"Hungry?" asked Vella.



Down upon Barry's cheek fell the copper wire, touching him ever so lightly (CHAP. I)

He nodded.

Doctor Kendon said: "By all means, let's eat. I've invited a group which should arrive at any moment."

"What am I supposed to do?" asked Johntha.

"Nothing but be yourself, and honestly. You see, Johntha, there is something rather strange—in that it is perfectly clear—in your ability to produce a concrete technical science during a stage of delirium. What, exactly, is thought? Who can answer? Perhaps your case may solve a minute bit of that never-ending question."

"I'll try," said the man. Though he wondered. There was not a doubt in his own mind that if he tried to explain the full occurrence, they would try to put him away. A complete exchange in personality but with retention of memory. A baffling improbability but none the less evident. To try to tell them that he was Barry Williams, inhabiting the mind of their friend, Johntha, might be hard to swallow.

Statements to that effect following a

known mental illness would be strictly discounted as hallucination. If he hadn't met the real Johntha in a mental rapport during the night and had his wonder confirmed, he would be largely convinced that Terra was really the dream of an invalid mind.

Yet he hated to put them on the wrong track. Deliberately to mislead them went against his training in scientific accuracy.

Then his reasoning reached logic. Since they'd not believe him if he told the truth; instead, they'd leap to the other conclusion anyway, he would tell them or lead them to believe what they wanted to believe. In that way he would do little harm, and would eventually arise out of suspicion. Once they thought him mentally capable, he might be able to start an interstellar project.

"Johntha spends much of his time in reverie," said Vella.

"I don't doubt it," the doctor said with a smile. "It is natural. He has been through an illness and has come out of it slightly in mental confusion. Give him time."

"I was merely trying to recall, to marshal

facts in my mind."

"Excellent," said the doctor. "I hope the logic—"

The chime of the doorbell interrupted Barry Williams, and Doctor Kendon went to the door himself to admit three men. He brought them over to Barry.

"Gentlemen, this is Electronician Johntha. Johntha, these men are Physicist Tharmane, Psychologist Crenda, and Atomician Homarr. We invited Mathematician Maradun too, but where is he?"

"He said he would be along later," said Homarr. "He can catch up on any notes."

"He can," agreed Doctor Kendon. "However I'd have preferred to have him here at the onset."

Physicist Tharmane laughed cheerfully. "As a mathematician, he is uninterested in anything that cannot be set to equations. If Johntha remembers anything of mathematical nature, we can set them down for Maradun, who will be just as happy at the cold paper as with the warm man."

Crenda, the psychologist, took objection. "You place too heavy a hand on Maradun's personality," he said. "Just because his mind is mathematically trained is no reason to charge him with preferring figures to people."

This brought a laugh because both men had been joking with one another for years. Then Vella returned from the kitchen with a huge tray of light refreshments, and the doctor introduced her all around.

"Vella," he said, finally, "I've not asked you yet, but I assume that you will take notes?"

"Of course," she replied sincerely. "Anything to help."

**K**ENDON gave her a reassuring glance. He said, "For the record, we've watched Johntha carefully since he awakened. At the initial stage, he seemed baffled by names and places. It was as though he might have been an impostor, placed there for some unknown reason. However, no impostor could have conducted himself with such finality, nor would an impostor own Johntha's personal set of physical identities. He is positively identified as Johntha."

"Being of naturally suspicious nature," queried Crenda, "has anyone considered the possibility of the records being tampered with?"

"We have. But minor items such as fingerprints in this house, in his own laboratory on all his tools, and found in his school-day textbooks all agree. There is not the least doubt."

"I agree. Go on."

"We let Johntha lead us to the car, which he picked out unhesitatingly. He dressed himself and selected the proper clothing for Johntha's personality. But this is wasting valuable time. In the final record, Vella and I will recount the many ways in which we sought to detect fraud. Besides, there is no motive for fraud."

The psychologist nodded. "I'll take exception, but I won't voice it until I've seen more of this case."

"Our reasons for questioning the man's identity were, as I've said, due to a slight unfamiliarity with his surroundings, names, places, and other items. Other things of equal question were his insistence on his ability to devise atomic engines. He mentioned a number of alien things with easy familiarity."

"There was, for one instance, a space craft called the *Star Lady*. This was supposed to be a superspeed ship capable of interstellar flight. According to Johntha, at that time, he had been a man called "Varri Wey-yaimx," on a strange planet that was called "Yearth."

"His job was developing or improving the atomic engines, which he said were unable to produce sufficient power to reach interstellar speeds without approaching the overload factor. He then attempted to prove his false identity and produced considerable logic of a strange basis."

"I'd like to add that from your sketchy description, I consulted Maradun," suggested Tharmane. "He tried a couple of the equations and shook his head. They didn't add up, or were based on what he called a false premise."

Barry Williams spoke up: "All premises are false until proven."

"Right," Homarr said, chuckling. "And though we've been tinkering with the atom for about a hundred years now, every now and then a new particle comes roaring out of the mess to foul up the mathematicians. Then they have to go all the way back to the beginning and re-build."

Barry looked at Homarr. "You're an atomician," he said. "What do you think of using the total annihilation energy of the



alpha particle as a means of power?"

Homarr's eyes glowed. "The sun makes alpha out of hydrogen. Total annihilation of alpha—what a wonderful dream!"

"Dream?"

"Certainly. It takes a lot of energy to make alpha out of hydrogen. Tremendous input is required to make that reaction go. To get it out—how could you make the reaction self-sustaining?"

"I—ah—"

"And if you had generators powerful enough to blast alpha into complete energy, what kind of stuff would you make the generator out of?"

"Force fields."

"Oh, we've used them—the sub-etheric level—to restrain atomic reactions. But what kind of system could be devised? I'm puzzled."

**B**ARRY WILLIAMS sat there cursing his imperfect memory. Back on Terra the problem had been solved without the use of the sub-etheric levels, though it would require much practical improvement. As things stood, the *Star Lady's* engines did work, but at a dangerously low factor of safety.

"Furthermore," added Homarr, "how would you localize the reaction? Alpha is a high-energy nucleus, and it is a standard rule that when there are two possibilities of reaction, the one with the lowest energy level will go almost exclusively. What would you contain the reaction in?"

That multiplied the problem. There was something about extended magnetic fields in a complex pattern that generated sufficient starting-energy without back-fire. Barry mentioned this vaguely.

"Impractical. How do you develop fields of such intensity? Not in any prime mover I know of."

The door bell rang again, and Vella entered with the mathematician, and he was introduced all around.

Physicist Tharmane nodded and then said: "Homarr has been in slight argument with Johntha. Perhaps you may be able to shed some light on the validity of Johntha's premise."

Mathematician Maradun took several sheets of paper out of Vella's notebook, casually found a large pencil in his pocket and then sat with both the pencil and himself poised expectantly.

## CHAPTER VI

### *Alien Handicaps*

**I**N AN EFFORT to aid his concentration, Barry Williams scowled, and pressed both hands against his forehead.

"The problem is more psychological," said Doctor Kendon. "Crenda, how possible is it?"

"It is quite possible," answered the psychologist. "The subconscious mind never sleeps. The subconscious mind is but a master file-index; a library of facts and experience. Anything handed to the subconscious mind by the conscious mind for tabulation will be inspected and evaluated in terms of the subconscious mind's experience. The answer will then be returned to the conscious mind for use.

"Insanity," he continued, "is when the conscious mind discovers conflicting answers, or dislikes the answers vitally, or is confronted with answers which, if followed, are mutually exclusive."

"Meaning?" asked Tharmane.

The psychologist smiled. "Well, it's like this to give a crude example. A man is standing on the side of a mountain. An avalanche is approaching. The man's conscious mind takes in all the details. The subconscious mind looks over the data and says: If you remain, you will die. If you jump, you will die. There is but one escape and that is to fly like a bird, which is impossible."

"So?"

"Who can predict?" said the psychologist glumly, and spreading his hands in a gesture of helplessness. "All I hoped to explain was that the subconscious mind will hand back data of sheer fact. If it happens to be terrifying data, it is still handed forth. When the conscious mind is confronted time and time again with terrifying data, it begins to pass erratic data to the subconscious. The subconscious mind has no means of accepting data directly, so it takes the false data and uses that to evaluate future information. Store a lot of falsified data, and you have insanity."

"But in Johntha's case?" urged Tharmane.

"We got a bit off the track," admitted the psychologist with a smile. "It is quite pos-



sible for the subconscious mind to come up with an answer during sleep. How many times have we been baffled by a problem; gone to bed in desperation, and awakened to resume the problem with success? That comes because the subconscious mind has been working on the problem all the time. Sometimes the subconscious mind will come up with the right answer and produce it in a very clear dream.

"If the conscious mind doesn't understand it, we get distortion. An erratic mechanism—the problem—may be depicted in a dream as a fractured toy, a carousel running backwards, or a weapon that fires improperly.

"In the case of Johntha, let us examine the motives of the mind. Johntha was ill with a nervous disorder that threatened the mind. The mind as a means of remaining sane did claim that he was someone else. He became this alien on an alien planet which possibly does not have the micro-organisms that cause neurophasia. He built up a complete life, a new personality, a new field of endeavor.

"The new personality must be logical, for Johntha's mind is technically trained. It is quite possible that the uninhibited subconscious mind will accept a problem called impossible by a mind trained to accept the impossibility as such. It may be impossible because of natural causes in which case the entire thought-pattern is false. If it is impossible because of lack of data, then the mind may well leap to the right conclusion and produce something logical."

The mathematician grunted. "In which case the waking mind will reject it because it is not understood."

"Right. To the conscious mind the thing is still impossible."

"I'll withdraw my objections to Johntha's super-powered engines," said Atomician Homarr, "if Maradun can juggle Johntha's cockeyed equation into something real."

"We'll have some unknown terms," warned the mathematician.

"Dig it out and we'll find out what the terms mean," Homarr suggested.

**B**ARRY WILLIAMS struggled to remember his mathematics. Adding to the gradual fade of the details was the difficulty of transposition of the Earthly terms into Trendan mathematics. Their manipulation of equations was different. Their method differed. And though Pi was still

the same number, the symbol was different and the means of stating the numerical value of Pi was different.

He took a sheet from Maradun and tried to write an equation. He thought of it in Earthly terms, which was difficult enough in Johntha's mind, but when he tried to write it down with Johntha's body, he ended up in the same block as he'd found when trying to say *Earth* or *Terra* the first time. But a Trendanization of the term *Earth* into the alien form: "Yearth" would not serve for a complex equation upon which depended the development of an atomic reaction.

Especially one that was unknown as to method and procedure. He tried, and he tried, and there were a few distorted scrawls on the paper.

Maradun shook his head. "Meaningless," he said.

Barry tried to explain in words, but Maradun stopped him after several minutes. "We can all theorize," he said, and the atomician agreed that sheer speculation on that problem had been done for years, only much clearer.

"But supposing that I've produced a possibility based on facts unknown to you?" argued Barry.

"Won't do us any good unless we can get these unknown facts."

"But I tell you it can be done!" said Barry.

"Yes?" said Homarr politely—too politely.

"I've seen it done!"

"And once," smiled Maradun pointedly, "I discovered that the square root of minus one could be factored into a simple binomial, a divisor, and a constant; all real identities. I was reading a paper before the Trendan Mathematical Association, and all the members were hanging on every word, completely ignoring the fact that I was standing there on the stage clad only in my underwear. What bothered me most was the fact that I was standing with one foot in a bucket of cold water and one foot in a bucket of hot water."

Psychologist Crenda laughed. "Shall I interpret that dream someday?"

"Not unless you can make that factoring of mine come out even. The man who factors the square root of minus one into real numbers will be the greatest mathematician in the universe."

Barry Williams flushed.

Psychologist Crenda thought for a moment and then said: "It is obvious. Not only did

Johntha's mind create a new personality on a new planet in order to evade the neurophasia bacillus and return to health, but the normal wishful-thinking section gave Johntha an urge to be an atomician with space-craft specialization. You see, the subconscious mind was still aware that Johntha was still on Trenda and still ill. But if he could devise a means of traveling through interstellar space, then the illogiciencies of the false personality could be erased in fact. The maze of the mind is complex."

Doctor Kendon nodded agreeably. To Barry he said: "This dream of yours is fading?"

"It seems to be," Barry said. "When I first awoke, it was quite clear. But I find myself slipping into the personality of Johntha by the moment."

Then Mathematician Maradun looked up from his paper and said: "Johntha, remember that any mathematician can set down an equation of considerable complexity, assign values, and solve it for all sorts of factors. Your equations are of this variety, what little I can make out of them. The trouble is that you can not recall the proper values to assign to the various unknown functions."

**D**OCTOR KENDON smiled tolerantly. "I thank all you gentlemen. And I believe that Johntha is cured. Johntha, you may return to your old line of work as soon as you care to."

"Tomorrow," said he.

"As for the rest of us," said Crenda, "I'll say that we've enjoyed the discussion, though nothing came of it."

"It's the wasted time," said Doctor Kendon.

"Not at all. Electronician Johntha is a valuable man to Trenda. We can well afford

to spend an hour or two getting him set properly after his long illness."

Hours later, Barry Williams sat in the library, reading. He walked up and down occasionally like a caged animal. He used sheet after sheet of paper trying to recapture the science he had been so apt at on Terra. He failed—miserably. He fought for the symbols and they eluded him. And he found himself thinking in circles.

Vella, unquestioningly loyal, took her small car into the city and returned with several good texts on atomic theory, both practical and theoretical. He took them and pored over them, setting down factors that he was able to decipher and translate. It was all there, right up to the last few weeks of Trenda's work on atomic theory. It paralleled the Terran work, which was of considerable help—but it did not go far enough.

There was a great gap. Not in the theory itself, for the possibilities of releasing the total annihilation energy of alpha particles was discussed as a desirable fantasy. It discussed also the possible means of starting the reaction as well as the theories of how containing such a reaction might be achieved.

This was of no help whatsoever. Trenda had no idea of anything remotely practical. It was merely negative evidence and completely in avoidance of the practical means used on Terra. They ignored the Earth method because they were in complete ignorance of it. As such—Barry Williams failed to learn a single thing from the stacks of books.

Night came swiftly, and Vella prepared dinner.

Barry put the problem out of his mind then. He gave up for the moment because

[Turn page]

# HEADACHE

UPSET  
STOMACH

JUMPY  
NERVES



# RELIEF!

THANKS TO FAMOUS  
**BROMO-SELTZER**

Millions turn to Bromo-Seltzer to relieve ordinary headache *three* ways. It's famous for giving fast help. Caution: Use only as directed. Get Bromo-Seltzer at your drugstore fountain or counter today. A product of Emerson Drug Company since 1887.



too much striving was making him stale and he preferred to bask in the pleasant thought of Vella and he together.

This one factor, he noted, was the only thing that seemed untouched by the molding process that was going on in his mind. When Vella entered, he became aware, vividly, of himself as Barry Williams.

It was very pleasant to see Vella in an apron, working in the kitchen. Her presence at the other end of the table pleased him greatly, and after dinner, he ignored his problem, sitting in the deepening night, just talking to the girl. In this, he found little to say, but he plied her with questions about the year or more of his illness and urged her to tell him what she had been doing. He took silent dislike to all males she mentioned in friendly tones and enjoyed with her whatever recreation she had taken that was not of a man-woman kind.

The evening went swiftly, and it was not until Johntha retired to his room that the problem came up again.

It came with a sickening realization that his—Barry Williams's—experience had faded terribly. He had been unable to make anything sensible out of his atomic theory.

He had renounced his Earthly birthright for this. Forgetting Vella as an impossibility, ever, he had come here of his own will in the hope that his act would make Terra successful in the attempt to get the *Star Lady* into space. Returning to Earth would have been futile; coming here to Trenda had seemed the only way. But he and Johntha were in the same category. It was reasonable to suppose that anything that he experienced on Trenda his counterpart on Earth would find similar.

And he had failed to produce anything cogent.

Was Johntha as frustrated on Terra? Would he awaken with the full knowledge of space-problems plus those of the sub-etheric level? Or would his Trendan science fade and die, leaving the man helpless to solve the Terran problem?

It was a terrifying possibility, and far too great a possibility for his peace of mind. For just as atomicians gave little heed to the theories of electronicians here on Trenda, so would the communications experts on Earth be inclined to question a complete new science so far from both the communications and the atomic fields that had been "dreamed" up by an atomic expert.

Or should he have insisted upon the fact of his change in personality? That might have lent sufficient weight to his words to force the atomician to experiment at least. That is, providing he could have convinced them. Were he to persist in the transposition theme, he knew, his next habitation would have been a psychic ward under strict observation, and the possibility that, forever afterwards, his word and his judgment would be subject to critical scrutiny.

So he had failed. And he knew instinctively that his own failure would be mirrored by the man on Earth.

He had given up his Terra life on a gamble and he had lost. For all the benefit that either Earth or Trenda would derive, Barry Williams and Johntha might as well have returned to their own bodies. It would have made life less confusing to both of them.

Add to all this the fact that he was attracted intellectually to a woman who was by all common knowledge, his sister. The body he inhabited was still Johntha's, and despite the mental affinity for the girl, the body responded only in a brotherly way. Barry Williams was sincerely glad about this. There would be enough torture to go on living near to Vella in her brother's indifferent body. It would have been intolerable frustration if Barry's instincts had been able to arouse Johntha's body.

## CHAPTER VII

### *Barred Cell*

JOHNTHA had awakened at the same time as Barry Williams after their brief mental rapport. His deep admiration for the man was still strong, and would probably be strong for the rest of his life. He knew Barry Williams' mind, and knew the cost of that decision. He sprawled easily on the hospital bed and considered the thing fully. His determination to measure up to the other man's decision rose strong within him. He would succeed!

No self-curse for failure entered Johntha's mind for he set aside the possibility of failure as something not to be considered. As he lay there thinking, the nurse came with breakfast, and with the nurse came the doctor and several colleagues.



"Hello," said Johntha. The doctor nodded a greeting. "I'm feeling swell this morning," added Johntha hopefully.

Doctor Edwards went over the supposed Barry Williams with a critical eye, testing and inspecting.

"It's amazing," he said to his friends, "that this man, struck on the wet forehead with a high tension line, did not die."

"Miraculous," agreed the nearest physician. "Especially since the recovery has been so complete in such a short time."

Edwards nodded agreement. "This is Barry Williams," he told them. "Barry, these are doctors whom I have asked to consult with me on the case. Doctors Hammond, Burger, and Morse."

"How do you do?" Johntha said. "Am I four doctors worth of illness?"

The laugh was professionally neat.

"Now," said Dr. Edwards, "my trouble is this. When Barry awakened, he was quite puzzled about himself, where he was, and what he'd been doing. I trust that we can discover whether any real damage has been done by that rather severe electric shock."

"He was puzzled?"

"Yes," replied the doctor. "First, he recognized nothing about him as familiar. He rejected the words 'Car-line' and—"

"Understandable," said Dr. Hammond. "A simple psychic block."

"Then he insisted that he was not Barry Williams. But he could not tell us who he thought he was."

"Shock," said Hammond.

"Then he asserted that his position had been on some project pertaining to inter-planetary communications and he mentioned quite a bit of some unknown science in detail. He again repudiated his accomplishments on the *Star Lady*. He claimed that he had been suffering for some time with a disease known as neurophasia."

"Neurophasia?" asked Dr. Burger. "Never heard of it."

"Might mean neurophthisis," suggested Dr. Morse hopefully.

"There are no signs of neurophthisis," said Edwards positively. "There is no wastage of nerve tissue. I suspected a layman's mispronunciation, so I checked on neurophage, neuropyras, and neurospasm. There are no symptoms of any of these, either present or past. This man's nervous system is in excellent tone."

"Might have been a mental trauma," Dr.

Hammond ventured. "His normally healthy mind may have revolted at the thought of illness striking so swiftly and completely, and it therefore has built up a careful false-memory covering a year of illness."

"But why should he reject his work on the *Star Lady*?"

"It has been a problem that has eluded him for some time," explained Doctor Edwards.

"Ah!" said the psychiatrist, Hammond. "An attempt to deny a frustration! Another psychic block."

"I am beginning to believe so," said Edwards to Hammond. "Another interesting thing is that the new science propounded by the patient should convince him that a proper application of it will solve his problem."

**H**AMMOND smiled. "So simple when the facts are known," he said unctuously. "A simple psychiatric case, easily explained and justified. A psychic block against illness, plus the delusion he can solve his problem."

The other men nodded. Hammond's word as psychiatrist was good so far as they were concerned.

Johntha, lying in the bed, listened with amusement. They had it so pat and perfect. If at this moment he should sit up and admit his name was Barry Williams, and agree that the car-line feeder was the cause of his mental confusion, the worthy doctors would attribute his remarks of last evening to the effect of electrical shock upon the brain.

But then any insistence he made as to the science of sub-etherics and the functions thereof would be immediately discounted as the ravings of a sick mind. In fact, it was well that he had experienced that rapport with the mind of Barry Williams or he would be convinced, right now, that his past experience on *Trenda* had only been part of a magnificent dream, and as a dream, he'd not have any faith in the value of *Trenda* science. But since meeting Barry Williams, mind-to-mind, he knew the real truth, amazing as it was. He was now prepared to accept the truth and go to work, applying sub-etherics to the atomic engines. He would carry out Barry Williams' ambitions regarding the *Star Lady*.

"Your observations are interesting, Dr. Hammond," he said. "But not true."

"Nonsense!" snapped Hammond.

"You are wrong."



"Indeed?" said Hammond with lifted eyebrow.

"Yes."

"Then suppose you give us your version," said Doctor Hammond pulling himself up haughtily.

"Surely. I am really—ah, the best that I can do with this Earthly tongue-training is *Chonthrad*. Leave it at that because it is of minor importance now. I was an electronic specialist on a world known as *Dhrenga*, a distant star. I was smitten about a year ago with a disease of the nerves which we knew as *neurophasia*. It is mostly a mental ailment and its name comes because the mind causes the nervous system to create great gaps in the nerve-impulses or in the speed of transmission along the neurones. Thus, you see, even the involuntary muscles are affected adversely, but the effect upon the voluntary system is complete loss of dexterity and timing, also balance."

Edwards started to speak but Hammond stopped him imperiously. "His version is important," he said seriously. "We'll not interrupt."

"Thank you," said Barry. "Yesterday, Barry Williams was struck by a falling high-tension line. It created a condition of shock in the brain. The mind of Barry Williams left this body here and entered mine on a distant planet. I, seeking a means out of the *neurophasia*, entered his body. I believe this is due to the fact that the two of us are closely attuned. At any rate, I came here complete with my knowledge of the *Dhregan* science of sub etheric wave mechanics, which will be instrumental in solving the problem of the *Star Lady*. This problem, you know, is one caused by the danger that the energy from the engines may consume the engines themselves. Like an ulcer, doctors."

"I note the reference to medicine with interest," said Hammond quietly.

"I am speaking with Barry Williams' body, using his brain. My mind thinks, of course, in the terms of my own planet and my own training. But the brain which uses no false symbols, accepts the pure thought, and when I speak, the proper translation is made in the brain and the words come out with Barry's training in speech and habit. When I am spoken to, I hear the words, but the pure idea conveyed to the brain by the words is easily translatable into my own mental terms. Follow?"

"You have any proof of this?"

JOHNTHA nodded. He lighted a cigarette, a habit he found interesting but unnecessary to his mind though to this body. It was an Earthly habit. Trendans did not smoke.

"I have proof," Johntha said. "Last night I was about willing to doubt my past experiences; to term them dream or delusion. Then last night, my mind met the mind of Barry Williams. We discussed the transfer. We discussed our singular problems, and we decided that this carried-knowledge would most certainly fade if we each returned to our own bodies. On the other hand, if we returned to the other's body, each of us would carry sufficient information to enable—well, to enable me to get the *Star Lady* in working order. He—sent me here. I have a great admiration for the man. A man willing to give up his own ambition to satisfy the collective ambition of Earth is not often encountered."

"You see?" said Dr. Hammond. "Such perfect self-justification. Such beautiful sophistry."

"You are unconvinced?" asked Johntha.

"Your proof lies in your own mind only."

"But what about my science?" demanded Johntha. "I will solve the problem of the engines."

"My dear lad," said Hammond, "if fiction couldn't solve any problem, it would be poor fiction, indeed. I can think of a number of ways of solving your problem of the engines and I am admittedly ignorant of atomic physics. A super-ray or development of some unknown level of energy peculiarly adapted to means of propulsion at velocities exceeding that of light. I need not go into detail, for in a story it is the characters who count and not the imaginative inventiveness of the author."

"I do have a friend, though, young Mr. Williams, who has, for sake of writing logically, created for himself a complete scientific background with false-basic mathematics and a close interrelationship of the supposedly real scientific phenomena. You, apparently have done the same thing as a means of explaining your illness and inability to solve the atomic engine problem. Frustration so complete will do that to the mind, you know."

"Look," said Johntha sharply. "I know what I'm saying and why."

"Naturally. Naturally. And for hundreds of years, all men believed firmly that a heavy

stone fell faster than a light one. False, of course, but they believed in it and their own integrity with equal vigor."

"So what do you hope to do regarding my case?" asked Johntha.

"I am going to prescribe a complete rest. You must not dwell on the atomic problem until I permit you to resume."

"You can't stop me!" said Johntha flatly.

"I can. And with complete satisfaction that I am helping to maintain the mental stability of a fellow man."

"It is my word against yours!" said Johntha hotly.

"I think it is your own word that will work against you," said Dr. Hammond. He looked meaningly at his colleagues who nodded solemnly.

Barry got the look. "But the science of sub-etheric wave mechanics!" he cried.

"Who would even attempt to try an experiment based upon a sheer hallucination?" said Dr. Hammond disparagingly.

"But it is a true science!"

"So was the solar system according to Aristotle."

"But I have proof."

"So did Aristotle. And what happened when Galileo tried to teach the Copernican theory to Pope Urban? Galileo discovered that he was bucking proof of a false nature but none the less solid."

**J**OHNTHA gave vent to his disgust. "Reverse that, will you? So far as I am concerned, your proof against me is as false against a known science as the case you bring to bear."

"The self-justification is remarkably perfect," explained Dr. Hammond to his colleagues.

"Like the case in a text-book, he even turns my own analogy against me, to aid his own proof."

"Then what do you hope to do?" said Johntha.

"Detain you, if necessary."

"Detain me!" yelled Johntha. "Like blazes you will!"

"It will be for your own good."

"Take your help and—"

"Railing against the rules will never help," said the psychiatrist placatingly.

"But, hang it all, the *Star Lady*—"

"Will either wait for your return or they will get a new atomic expert."

"But they can't!"

"Barry, quiet down or they'll never accept you back."

"But my promise to Barry!"

Hammond looked at Edwards. "You see?" he said. "He persists in the delusion."

"Delusion be blown! I'm going out there and go to work. See?"

Johntha got up and started toward the closet, hoping to get his clothing. His path was blocked by Dr. Burger.

"Don't be ridiculous," said Burger.

Johntha let the doctor have it right across from shoulder to point-of-jaw. Burger dropped like a limp rag.

That was the touch-off. The other three physicians leaped on Johntha's back before he could turn. Their sheer weight carried him down, and there were too many of them for him to fight efficiently. He slugged Hammond in the pit of the stomach and doubled the psychiatrist over his forearm. He kneed Dr. Morse viciously because that was the quickest way to get rid of Morse.

Edwards, meantime, was getting set, and the older man chopped the side of Johntha's face with the edge of his hand. It would have felled him cold if delivered by a younger man. As it was, the elderly doctor's blow staggered Johntha, giving Dr. Edwards another chance to get at him.

The second weak blow in the same place shook Johntha's frame terribly, and upon the third, the man went down, weakly. "He was still struggling when Doctor Edwards thrust a hypodermic into his wrist—an emergency thrust that caught only the edge of it but was none the less efficient.

Blackout came. . . .

Johntha awoke again to find a changed scene. Iron bars guarded the tiny window. The bed was small but rugged. It would be impossible to break up the bed and use any pieces to effect a break. The electric light was set, recessed into the ceiling and, obviously, could be turned off from outside, for there was no light switch. But the walls were not padded, and the restraining jacket that he had been delivered in was now gone. He never knew about that, incidentally.

Johntha sat up and swore vigorously. He tried the door, and then he rattled the door-knob hard. It was locked, of course.

The Judas window swung open and a hard face peered in. "Shut up," it snapped.

"Where am I?"

"Lincoln Sanitarium."

"How do I get out?"

"Through this door."

"Well, open it!"

"Not me, boddy, Not me."

"You *can't* keep me locked up," shouted Johntha.

"You're speaking from the cell now!" the guard laughed uproariously. "Remember?"

**A**NGRILY, Johntha went close to the Judas window. He peered into the guard's face and then said: "I'd like to poke you in that nasty nose. Get out and bring back someone with authority."

"Who, me?" asked the guard with mock servility.

"Yes," snarled Johntha. "You. Now git!"

"Aye, squire," mocked the guard.

"Scram," said Barry with as much menace as he could muster.

"Oh, go peel a egg," grunted the guard.

"Look, chump, you're in there, see, and there you'll stay. Giving orders ain't going to get you nothing. And threatening people wid violence will land you in a padder wid a jacket on, see? Now sit down quietly and in a half hour we'll start giving you treatments."

"Treatments?"

"Yah. Electrotherapy."

Barry sank down on the bed. Electrotherapy! They'd scramble his memory-pattern until it was like an addled egg. They'd destroy his subconscious evaluation of all of his own previous experiences. The card-file of his memory laboriously built up through the long years of his life on a day by day basis would be upset and all the cards scattered. Then in a year or more of careful sorting, he could replace them, but with a different set of values assigned to each.

The sub-etheric wave mechanics, precariously carried in his mind on a super-imposed, not-understood method would die completely since it was only his ego that retained it. The unnatural warpings of the convolutions of his brain caused by the superimposition would react to their pre-formed pattern and the memory of Trendan Johntha, would die completely.

And what of the real Barry Williams? His ambition would go unrealized. Johntha felt sick. The other man, willingly giving up his position, his friends, and his life to the job of getting Earthmen to the stars, would live and die on Trenda, never knowing whether Earthmen would place their mark

on the interstellar reaches. And then Barry's mind would live in torture of its own decision, for Johntha's mind in Barry Williams's body understood the instant and honest attraction that existed between Vella and the mind of Barry Williams. Barry was, to all intents and purposes, locked in the body of Vella's brother, and brother didn't marry sister on Trenda any more than they did on Earth.

Johntha knew that Barry was honest and true. Vella was untouchable to the Earthman. Hence the secondary decision. Had they known about this upset in plan, Barry need not have placed himself in a position of mental torture, living so close to and yet so remote from Vella. At least, on Earth, Barry could have existed on hope. Hope that they'd perfect the atomic engine and eventually find Trenda. A vain, hopeless ambition, but none the less vital enough to drive a man into super achievement. . . .

The door opened and men entered. Johntha leaped up. They weren't going to scramble his brain!

With insane strength he fought them. They won by weight of numbers though Johntha left a few broken heads on the way. Not trussed, but firmly held by hard, brutal hands, he was lifted and carried along the hallway, up a flight of stairs, and into a room, bare but terrible—equipped with a simple chair, a piece of electrical apparatus, and a headset. He was strapped to the chair. He fought them with his eyes and his voice and they pressed down upon his head the electrodes.

A flaming green light blinded him painlessly, and he knew no more.

## CHAPTER VIII

### *Rough-House*

**Y**ET BARRY'S bitter realization of a complete failure was intolerable. Simply to forget was impossible. Only by immersion could partial forgetting be accomplished. Therefore Barry returned to his laboratory in the city on arising the next morning. If he could not take Trenda to the stars, he would make communication between the four inhabited planets of the system a verbal two-way as soon as possible.



Unlike his difficulty in recalling the Terran science, Barry found that working in the communications field was quite easy. Of course, this was not the problem of frustration that his job had been on Terra. Here was a straight designing job with all factors known and the problem one of merely adapting the known scientific theory to practise.

Barry immersed himself in it. He applied himself diligently, made excellent decisions and cut some close corners with singular success. In the end it would be far less satisfying to have his—Johntha's—name on the usual bronze tablet at the various communication stations than it would have been to have the initial interstellar spacelane called by his name.

But he could no longer reach for the stars and hope to win. He could reach for a lesser goal and win, and he would win brilliantly. Perhaps after a high success of this minor nature, Trenda would give him permission to make the other attempt once again.

He kept a notebook at his side daily. Whenever he found something at all clear, he would set it down in the notebook and forget it. As the days added together, the notebook filled slowly with symbols that were half a corrupted Terran script and half good Trendan characters. The forms of the equations were mixed, too, conforming as they did partly to Terran and partly to Trendan conventions.

Some day it would all be clear, perhaps.

He worked long hours and accomplished much. He knew that both Psychologist Crenda and Doctor Kendon were following his actions with very critical eyes—and he also knew that they found only laudable acts. Occasionally Atomician Homarr would drop in to see him, and though it rankled his mind, he and the atomician would treat his dream as an amusing incident.

Inwardly, he knew that the atomician was not too certain. Crenda's statements about the subconscious mind being able to arrive at a solution that might not be understood because of conscious inhibitions in thought, had struck Homarr very close to home, and though the atomician did not think there was anything to the "unreal science" as he called it, he was not certain that Barry's idea was in the realm of pure imagination.

The mathematician called often, too. This relationship was amusing to both. From time to time a bit of Terran mathematical manipulation would creep into Barry's work,

and the complete difference to the Trendan style puzzled the mathematician. He had thought lightly of possible differences in symbol and structure, but had never done anything more than toy with the duodecimal system once or twice.

Maradun, like most mathematicians, was a chess-player of no mean ability, and he played often with Barry, though the Terran mind in Barry's body did little but hinder occasionally. That led to various types of fairy chess, which both enjoyed. Then, that in turn led back to what Mathematician Maradun elected to call "fairy mathematics."

They made a game of it.

Barry was no match for Maradun at straight Trendan math. There were few on the planet that were a match for Maradun. But in "fairy mathematics," using the distorted Terran symbols, Barry's additional training, however slightly remembered kept him abreast of Maradun. Barry knew that the reason was that the mathematician was forced to undergo considerable translation to interpret the symbols and the form; Barry thought that it might be like a man speaking a foreign language with a native some time removed. One thinks in his own language and translates, while the other man thinks and speaks in his own.

**B**ARRY was the only one with a real purpose in all this. The other Trendans were merely watching his development, and keeping a sharp lookout for any possible reversion. Barry encouraged them because he hoped that their constant presence and urgings would strike a close parallel, and possibly awaken—or re-awaken—the science that was slowly becoming less and less concise.

Or, perhaps, that one day they might strike the proper factors themselves. Barry did not care how Trenda succeeded. He wanted success at any cost, for he was still mindful of the parallel between himself and the man in his body on Terra. If Trenda, no matter how remotely circuitous a method, finally evolved the super-powered drive in its practical form, then he could be reasonably certain that on Terra, the man who spoke from Barry Williams's body would evolve the proper science again to make the *Star Lady* rise in safety and traverse the awesome gulf between the stars.

His memory of the *Star Lady* was fading in parallel to his loss of detail on atomic

theory. At first, he could visualize the sleek upright ovoid of space in every detail. Every mark, every line was clear. Then like photographs taken at greater distances successively, the image became less than wire-sharp, and the minute, fussy detail blurred through the overall conformation remained.

Like the matter of the window-ports and their shutters. He knew they were there, but he was becoming hazy as to what type of automatic hinges they used to drop the steel shutters over the clear glass—and later he forgot whether they dropped down from above, or swung over from the side. He knew they did not run on slides, but he wondered how soon it would be before he was uncertain as to that, recalling only that there were shutters of an indistinct type.

But the days wore into months, marked off by the regular rise of Trendera's double moon, and there was no glimmer of the secret of the atomic engine.

Barry went into the usual cycle of lows and highs. There were times when he felt that something must eventually come of it all. At other times he went into the blue funk of a man who has gambled all and lost everything. The "might have been" tone was desperate, though he knew that either way, no space travel would have come for Terra. He consoled himself at times on the upswing by a self-belief that a good try with failure is infinitely better than not trying at all.

Barry's big change in personality seemed, to his friends, only a change in his attitude toward women. Previously, the real Johntha had enjoyed their company. Now he did not shun women, but neither did he seek them out as he did before. He preferred the company of his sister.

For adding to Vella's attractions for Barry was his own inward feeling of being Barry Williams so much more vividly when they were together. At other times, the Barry Williams and the Johntha personalities seemed to merge. When he was with Vella, the Johntha side grew almost dormant and intellectually, at least, he became Barry Williams.

This feeling he nurtured carefully. He often thought that if his secret came to him, it would be during a time when he and Vella were enjoying one another's company.

It was quiet desperation. With the single-purposed mind of Barry Williams settling only to Vella, it was difficult to maintain a mentally brotherly attitude despite the fact

that the body he inhabited responded only as any brother's body would respond to a well-liked sister. Barry's trouble was not unique among men. He had been the type that paid little attention to womanhood until one entered strongly enough to create a desire. From that moment on he would notice only one.

**I**T BOTH helped and hurt. For Vella was in complete ignorance of the change in personality. Therefore she failed to notice his deepened attention to her. Similarly she blithely accepted the company of other men while Barry kept his mouth closed tightly.

Although he was more Barry Williams when he was in her presence, her presence was too compelling to permit him more than secondary attention to his problem. She often chided him for drifting off in reverie in her presence, which did not help, for in those times, Barry was trying desperately to penetrate the veil that covered his memory.

At one time he decided to give up completely, thinking that if he forgot the Barry Williams, he would then become as much Johntha as Johntha was or had been. That might solve his difficulty at one complete swoop. Then, as Johntha he would return completely to Johntha's habits and finally achieve happiness and emotional stability.

It did not work. For uppermost in Barry's mind was the simple desire to see interstellar space conquered. He could not look upward to the stars at night without having the fact of his true being brought back to him. The twinkling stars were a constant reminder, as was Vella.

Passing days wore into a year, and the work on the communications system progressed rapidly on Trendera. When the initial testing of the station was under way, Barry made plans to supervise the final details of the similar installation on Vardun, which was Planet II. He spent some time in considering whether or not to take Vella along, but when the time came, there seemed to be some unspoken agreement between them, for he returned home to find Vella trying to make the final snap shut on her traveling case.

Using his greater weight, he did it for her and then looked into her eyes and asked: "Going along?"

"Positively," she said. "My part in this project has been small, but important. I'm

going to be there when the final link is made. I want to see it."

"Your part?" he asked stupidly.

"Haven't I kept the chief electronician well fed, well housed, and reasonably happy?"

He laughed. "More important than it sounds," he admitted.

"There," she said. "So I'm going."

He nodded. "You've been a solid character, Vella."

"Poof," she joked. "Not too much so."

"Yes, you have. I'm not too easy a brother to live with these days."

Vella stood up and faced him. "You're closer to me than ever before," she told him simply. "You've changed, Johntha. Up to your—illness, you never enjoyed the same music as I did, not the same pictures, writing, or games. Now we enjoy them together. Don't give me too much credit, Johntha, because it is very easy to please someone who is completely compatible."

Well, he thought, compatibility is about all we have in common.

"Am I?" he asked in a pleased voice.

"Give it a better name," she laughed.

"When I'm feeling a bit low, nothing you seem to do or say gets banal. When I'm feeling very good, we're both feeling good. When I want a quiet and restful time, it seems as though that is the time when you prefer to sit by the fire and read quietly, and if I feel like making noise, you get a big kick out of calling up a slew of people and raising the roof."

He grinned boyishly. "You're just saying that because it's true," he said with a laugh. He put both hands on her head and ruffled up her hair.

"See?" she said backing off a bit. "Normally I'd slay you with the can-opener if you did that. Right now I'll bet I can tie you in a knot. Rough-house?" she asked, and not waiting for an answer she ran forward and caught his hands in hers, and then tried to throw him to the floor in a sort of misapplied judo hold. He fended her off, laughing but tripping over the bag that was still on the floor.

**C**ONCERNED about her, Barry fought a double-battle. He was fending her off with both hands and at the same time he managed to throw his weight around so that when the tripping came to its crashing conclusion on the floor, the impact of her body

was cushioned by his.

That ended the battle right there. When approximately one hundred and fifteen pounds lands full on the average male midsection, most ideas of fighting back leave at the same time the breath leaves.

There was a mild blackout, and Barry came to with his head pillowed on Vella's lap. He took in a deep, ragged breath.

"Hurt you?" she asked, bending down over him. Her face was full of concern. "Honest, I didn't mean to murder you all the way. Just a little bit."

He grinned weakly. "You shouldn't have planted that bag right there," he told her. "I'm all right."

Her fingers traced the contour of his cheek and her face became solemn.

"I'm sorry," she said quietly, looking into his eyes. Her hair tickled his forehead and he reached to brush it away. Instead, his hand only got as far as her cheek, where it stopped. Her face was warm and soft in the palm of his hand. He returned her solemn look for several heartbeats, and then his hand came down. Her face followed it.

Her lips were warm and soft. The kiss was gentle and affectionate. Then, quickly, it was over.

"Y'know," he said, looking up into her face with a laugh, "I'll bet you'd be fun to neck with."

"I might be able to get you a signed affidavit," she returned, putting her hands beneath his shoulders and lifting him to a sitting position on the floor.

"I'll strangle the guy!" He glared. His laughter was forced but it sounded genuine enough. He climbed to his feet, rubbed his midsection ruefully, and then gave Vella a hand up.

"Now," he said, "I suggest that we use any more rough-house we have left in our systems to wrangle the baggage, you baggage!"

She stuck her tongue out at him. Then she laughed and went into her bedroom after the other traveling bag.

And as Barry watched her retreating figure, he made a mental note. Whatever had happened to Johntha's mind on Terra had better be pretty good to make it worth all this. He took a deep breath and put the worried thought out of his mind.

But the question of what had happened when Johntha woke up on Terra in Barry Williams's body continued to bother him. It



would continue to bother him until it was either solved or he was dead.

Vella came back with the other traveling bag. The warm merriment was still in her face, but Barry carefully avoided a repetition of the rough-house. To her it may have been mere jollity, but to him, it was a euphemism for physical contact. The specter of wonder about Terra was too strong, now.

## CHAPTER IX

### *Test Journey*

**ONE** AFTERNOON Barry and Vella took off from Trenda to Vardun on the daily space run. Exchanging light banter, they embarked, Barry having regained all of his high spirits, once he quit wondering about possible happenings on Earth. He preferred to put those thoughts out of his mind anyway. Only when he was at the lowest ebb of his physical strength did he worry about the other man's ability to recall the sub-etheric phenomena. He knew that the principles were less complex than the three or four steps of the atomic theory that he had been unable to recall clearly.

When he felt best, Barry recalled that the sub-etheric level of wave propagation had been suspected by a few savants on Earth, but as yet they had not suspected that the idea was based upon anything tangible enough for a general investigation. In time eventual success might result, though how soon was impossible to predict.

His moodiness, after the rough-house with Vella, had been noticed by the girl and she tried hard to raise his spirits. Her efforts met with success.

He showed lively interest when the ship finally lifted from Trenda and hit the outer sky. He wanted to see the entire sky, and though he was no stranger to space travel, this was his first trip since the transposition of personalities and he wanted to see it with new eyes. But as always, there was not a single stellar formation that he found familiar. For all Barry knew, Trenda might be less than a hundred light years from Earth, or Trenda might lie in any one of the outlying galaxies so remote that only an astronomer could find them on the super-perfect photographic materials, exposed in

the thousand-inch mirror on Luna. The numberless stars of the galaxy were too awesome to contemplate. When this number was multiplied by the innumerable galaxies, the possibilities of locating this particular one were too great to consider.

Trenda, he thought, might be "anywhere."

He had mentioned the possibilities of two races being almost identical within the universe to Mathematician Maradun at one time, and the mathematician had agreed.

"With a pretty good approximation of an infinite number of stars possible in the over-all universe," said Maradun, "the possibilities of a planet very similar to Trenda in physical constants must be tremendous. Among these, which must number into million upon million, the chances of a race almost identical would be likely, despite the myriad details that might cause a minor deviation. If the factors of classification which are required to throw a race into this category are exceeded by the number of possible breeding-planets, then the possibility of a similar race are directly proportional to the number of classification-places divided by the number of breeding-planets. Follow?"

"Vaguely," said Barry, dropping the subject as being one that would never be solved in that manner.

But in space or not, the sky was utterly strange. As for physical similarity, his knowledge of anatomy was fair, and he and Vella seemed quite similar. But there might be hidden factors. He'd like to know the chances of that, mostly, though these things were merely questions of academic importance to him.

He turned from the passengers' observation port. Vella was talking to the captain. She motioned him over.

"Johntha, this is Captain Trammlo. Captain, this is Johntha."

"Glad to have you aboard, young man," boomed the captain. "You're more or less of a celebrity, you know."

"Nonsense," answered Barry.

"You are," insisted Trammlo. "First, you are one of the very few to be cured of neurophasia, and secondly you are credited with the huge job of developing the sub-etheric bands for communications on a verbal basis between the planets. You don't read papers?"

"Of course I do," laughed Barry.

**THE** CAPTAIN of the ship shrugged. "I'm an old man," said Trammlo seri-

ously. "I've been captain of space craft for twenty years. Worked my way up from generator technician. But, Johntha, I'm never quoted in the papers."

"I'm no genius," said Barry. "Any number of men could have done it."

"Granted. But Johntha is the one who is doing it! That makes you a popular fellow. You two will eat at the Captain's table. That, young sir, is an official order. I defy you to defy it."

"And if I do?" asked Barry, with curiosity.

"Space mutiny," said the captain in a sepulchral tone, drawing a forefinger across his throat. "Oh man! We really throw the book at those who defy the captain's orders!"

"I'd better join you," laughed Barry. "I see I can't lick you."

"I'd like you to join me in the scanning room. I think my communications man would be tickled green to have you visit him. Do you mind, or have you better things to do?" the captain asked.

"Come along?" Barry asked Vella.

She shook her head. "Electronics never fascinated me," she said. "I'll see you around." He nodded, but it was slightly sour. He turned to follow the captain.

"We'll not keep you long," promised the captain. "I'd not have bothered you at all, but you are a rather serious-minded lad, you know."

"Am I?"

"You are. Look, Johntha. You've been an hour in space. Look behind you. Every male on the promenade has paired himself off with some woman—or vice versa. You are traveling with your sister and you make no attempt to leave her; to introduce her to some eligible man; or even to go off seeking company yourself. So, therefore I assume that you are serious-minded, and won't mind a bit of technical gab. But you shouldn't assume that your sister is serious-minded too. She might like a bit of dancing."

That, thought Barry, is the main trouble with being attracted to a girl supposed to be your sister. People make it extremely inconvenient.

He laughed and said, "I forget, at times."

"Sure you do. But I remember—and I, young man, was not a serious-minded youngster. Forget it occasionally and be light-hearted. All work and no play, you know." Captain Trammlo opened a huge door marked *No Admittance* and waved Barry in.

They went through corridors and up ladders until they reached the big scanning room on top of the ship. "Look, gentlemen. This is Electronician Johntha!"

Luckily the ship was on automatic, for they all left their posts and crowded about Barry, shaking his hand. He responded cheerfully enough, but he was wondering what Vella was doing. There was no escape. So Barry took the crew's generous acceptance of his presence with good grace. They made him one of them, and then plied him with questions.

The talk circled swiftly and took the usual line. Barry was asked about the sub-etheric communications bands, which was a subject of interest to him, too. He started to describe the job from start to finish, and the crew settled comfortably, anticipating a long talk. Barry saw the expectancy and surrendered to the inevitable. He had no right to Vella's affections anyway.

He continued talking.

As for Vella—after Captain Trammlo led Johntha away, she turned to find herself partly surrounded by a number of admiring young men.

"You're Vella," said a good-natured fellow beside her.

"I admit it," she laughed.

"Johntha's sister?" asked another young man.

She nodded.

A THIRD man came up the deck and shouldered his way through. "Beat it," he said with a laugh. "I have the inside track here."

"Hello, Helmond." Vella greeted him with a smile. "I'm surrounded."

Helmond chuckled and asked, generally: "Are these guys courting you or are they courting Johntha's sister?"

"Has she got a brother?" asked the first man in a plaintive tone.

"Who's Johntha?" returned the other man.

"I'm flattered," said Vella.

"Look," said Helmond. "There's no sense in fighting about this, because as winner I don't care to have fist-marks all over my face as I take the lady dancing."

"Or," added the first man drily, "have shoe-prints all over your face as you approach some other woman for the same pleasure."

"Be that as it may—which I doubt," Hel-

mond grinned. "The point is this. Vella has been sort of a she-hermit for more than a year. What with nursing Johntha back to health, taking care of his place for him, and one thing and another, I doubt that she's even held a man's hand for better than two solid years. I proclaim a truce in the battle of wits, and we shall see that Vella makes up for lost time. There's three of us. We shall pledge ourselves to keep off all other vultures for the duration. And now we shall seek the dance floor and dance off her shoes. Right?"

**V**ELLA laughed uncertainly. Then she nodded.

"With three escorts, I'll make up for lost time in a hurry," she said.

"We'll match for first honors," said Helmond.

He won, and he steered Vella out on to the dance floor.

"Goodness," she said. "I'm rusty."

"Nothing that a bit of practice won't cure," he told her. "Vella, being rusty on the dance floor is impossible."

"I am, you know."

"Remind me that I must speak to Johntha harshly."

"It's not his fault, really."

"Not primarily," said Helmond. "Secondarily, though, he is responsible. You're missing a lot, Vella."

"I felt that way while Johntha was ill. But it's been over a year now since he recovered, and honestly, Helmond, I've not been a bit bored."

"He could let you out more."

"He isn't 'letting' me out. I come and go according to my conscience."

"Then your conscience must stop feeling responsible for Johntha."

"I might turn it off."

"Do that until it is atrophied."

"Trouble is," said Vella, "this it isn't all conscience. I actually enjoy doing things for my brother."

"Doesn't sound like fun."

"Perhaps it doesn't. But Johntha and I have so very much in common."

"Look, little Vella! Intellectual companionship is very necessary to all intelligent people. That you find it with your brother makes it very convenient, but also it makes for not going places enough. You get into a nice, easy rut. Why enter a mental fencing bout with some guy you're not certain of when you can discuss the things you like with

Johntha? I know how it is. But it isn't practical.

"I know. But I still don't mind."

**H**ELMOND stared at her, then waved his hand in an exasperated way.

"But, good grief, Vella! For more than two years now you've been devoting yourself to that brainy brother of yours. I salute his ability and I am flabbergasted at your constancy to his cause. But two years out of your young life is important, too, Vella. The men you danced with in school are settling down to raising families and you seem to be withdrawing into a sort of shell. It's not right."

"I still don't seem to mind."

"But the Vella I knew was not the mousy type. Vella was the girl with the popularity-plus, with the longest date list, with the brightest look and the happiest future. Vella used to have light feet and a gay smile. Vella still has 'em, gal, but she's not using them."

"Helmond, I don't mind it a bit. I admit it looks odd, but somehow the idea of finding a life completely away from Johntha seems odious to me."

"Hang it, Vella! The man who marries you isn't going to marry your brother too!"

"I haven't considered marriage," she said simply.

"I give up," he said. "You're not concealing a love for some unknown?"

"Not at all. I've told the truth."

"Well, I'm licked," said Helmond solemnly. "And I don't get it."

It was hours later when Barry reappeared. Vella had danced around her three escorts time and again, and was making another round with Helmond when Barry entered the room. Helmond was still talking to her. He said:

"Speaking of which, there's Johntha now. Looking for someone, I'll bet. Wonder who?"

Vella turned from Helmond's arms and went to Johntha.

"Like to dance with your sister?" she asked brightly.

And Helmond stood and watched them dancing with a huge question in his mind. "I'll be darned," he said under his breath. "But Vella does show a lot of interest in that big brainy lunk. And I'll bet that neither of them are aware of it."

He was wrong. Barry knew, and it bothered him and pleased him simultaneously. . .



## CHAPTER X

*Angry Scientist*

**W**ORK ON Vardun was nearing completion when they landed. Under Barry's skillful supervision, the work leaped forward and as the days passed, each showed definite progress. The days added into months, and then two months passed, and in the middle of the third month the sub-etheric set was being given its load tests. These were more than satisfactory, and on the morrow, there would be a complete test of the first interplanetary voice-two-way.

The intervening hours were spent on the ordinary coded communication means, developing times and procedures for this test. A full three-hour-period was spent merely in synchronizing the clocks between the two planets. Perfect synchronization was impossible because of the twelve minute time of transmission, but an approximation was made which was assumed to be close enough.

Still tired, but enjoying his moment of triumph, Barry stood at the Vardun end of the interplanetary beam and watched the clock sweeping around to the zero second.

This was his moment. This was compensation for his decision back there in space a year ago and God knows how many megaparsecs away, where he met Johntha's mind in the darkness and sent the Trendan back to Earth. He had given up a lot to feel assured that Earth would gain the stars. This was compensation, for the successful culmination of the job would make him truly famous and financially independent for life.

He smiled to himself. He thought of how

impossible it would have been if he hadn't treated his Earth life as a dream. Never would he have gained the confidence of the entire Terran System by insisting upon the truth of his transposed personality. Now, perhaps, he could spend the next few years in delving into atomic physics, and perhaps he could learn enough, and then add to that enough, so that eventually he could point the way for Trenda, also, to become an interstellar race. It gave him pleasure to hope. For though few people would ever know, he, Johntha-Barry, would be directly responsible for the start of—perhaps, if they were in different galaxies—two complete galactic empires.

A secret success, but none the less satisfying.

The old doubt still bothered him. His mental loss of the details of his atomic theory made him wonder how the memory of the man on Earth was enduring. Was he completely baffled? Was the *Star Lady* about to drive into interstellar space, or was Johntha still seeking through his clouded mind for the secret of the sub-etheric wave mechanics technique?

Would Barry ever know?

The dial swept around to zero-zero, and Barry pressed the button that started the system. With a prayer that Johntha was enjoying an equal success, Barry faced the phone and said:

"Lengla? Lengla? Can you hear me?"

"Yes, Johntha. As clear as a bell."

"Good."

"But you spoiled it," said Lengla, and chuckled.

"Spoiled it?" Barry asked. "How?"

"You should have said something truly historic. This is an historic moment!"

[Turn page]

## A JOURNEY TO THE LAND OF LEGEND!



*Summoned by voices from the past, Jay Seward assumes the role of Jason in—THE MASK OF CIRCE, An Epochal Complete Novel by HENRY KUTTNER*

Featured in MAY

## STARTLING STORIES

Now On Sale—148 Pages, Only 20c at All Stands!

Barry thought fast. His hopes were on another planet unknown light years away. This success was great, and everyone in the place was slightly giddy with the happiness that comes when several years of work turn up to be a complete success. Barry made an historic statement then.

"To Perdition with History," he said.

Then he handed the phone to another, and went to join Vella, who was standing there with gladness in her face.

"Thanks to you," he said directly and honestly, "we made it."

**H**E TOOK the credit and gave it to Vella. He knew who was responsible. For the real Johntha had planned very well indeed, and he, in Johntha's trained body, had merely carried out the rest of Johntha's wishes to the letter, adding only a few of his own ideas. He could neither disclaim credit as the masquerader he was, nor accept it honestly.

"Here," he called to the man now trying the instrument. "Move aside and let Vella talk."

"But I did nothing," she objected, "but try to keep my brother happy."

That, thought Johntha, was plenty. . . .

Doctor Edwards wondered what the matter could be. He'd met Jim Evans on the day of Barry's accident, and knew the man to be quick and resourceful. The call had been urgent, made by Jim Evans's assistant. Edwards hoped that Jim hadn't fallen across one of his own experiments. Edwards felt entirely satiated with partial electrocutions.

But the order was imperious and he went.

He was shown into a large laboratory as soon as he gave his name. Jim Evans, apparently, carried considerable weight in the place, for everything was dropped upon his arrival.

"Oh," he said, seeing Evans hale and hearty, though excited. "I was afraid this was a professional call."

"Doc, you hit it right on the button. Never a more professional call in your life. Look!"

"What?"

"Oh, sorry. This is strictly a new science to us, too. I've spent the entire night tinkering with Barry's cockeyed system. And I don't care whether he dreamed it up out of electric shock or hasheesh. Blast it, it works!"

"Works?" asked Edwards weakly.

"Definitely. Look, Doc. Do me a favor.

I want a shot in the arm to carry me. I'm dead on my feet and I've got to continue for the next few hours before I go beddy-by. Can do?"

The doctor gave Jim Evans a hypodermic that he said was guaranteed to keep him running at high gear for a week, solid.

"I don't care if I sleep for a month afterwards," said Jim. "I've got to get some more figures. I'm certain that taking some evidence of success to Barry will get him all hepped up and rarin' to go!"

"Barry Williams?" asked Doctor Edwards.

"Look, Doc. That man is important. He's even more important now that he's unleashed an inkling of this. We've got to nurture that—hallucination, and water it and weed it and reap it when it's grown to man-size. Then Earth will get to the stars, and when we get there, we'll be able to call back and say we've arrived. This is as big as the Great Pyramid. I'd suggest that you go back and tell Barry that we're working on it."

"They took him to the sanitarium—" Edwards began.

"They what?" yelled Evans.

**T**HE DOCTOR explained. "I don't give a curse if he's raving mad or thinks he's Napoleon," snapped Evans. "And did you say electrotherapy? Lucille!" he yelled. "F'gosh sake, Lucille! Get Lincoln Sanitarium on a Priority One and tell 'em that if they touch Barry Williams with a single volt, I'll burn their hides! Crass stupidity!"

"Now see here—"

"Yeah!" Jim Evans shouted harshly. "I mean your gang. So what?"

"I'll not have you interfering!"

"In this laboratory, you're a citizen, baffled and ignorant, see?" said Evans with his chin stuck out at Doctor Edwards. "I'm in a position here to call upon the services of the craziest idiot at large if he's useful. Do you realize that the man you've pronounced crazy holds within his mind the secret of interstellar travel?"

"But—ah—I don't understand."

"Ah, rats! You'll addle his memory, huh?"

"Look, young hothead, any man who fights like a demon because people won't pamper him in his preposterous story of transposed minds—"

"Might as well have something to fight about. I have, too! Yes, Lucille?"

"Mr. Evans, the treatment has been started."

Jim Evans took Doctor Edwards by the coat lapels and thrust his chin into the doctor's face and said:

"You are going over there right now and undo whatever has been fouled up by the initial treatment, see?"

"I'll try," promised Edwards, trying to shake loose.

"I'm going along to see just how you try. Get me?"

"I hope you are not—not—"

"Crazy, too? Listen, Doc, I'm an electronics specialist. Being crazy is a prerequisite. Now come along!"

Doctor Edwards afterwards remembered a wild, crazy ride through the streets of the city at full speed. A siren wailed and cleared their path, somehow. Jim Evans skidded the car for the last forty feet, bringing it to a racking stop at the sanitarium door. The car was still oscillating on its frame as Jim leaped out with the doctor in tow and banged open the front door.

"I'm Evans—Where's Barry Williams?" he demanded of the information clerk.

"He's seeing no—"

Jim lifted the man out of his chair by the front of the white coat and said:

"We're seeing Williams or I'll take this place apart."

Men came running, but Jim Evans faced them in an attitude of belligerency. That did not bother them, for they were used to taking care of men who wanted battle.

"I'm Evans of the *Star Lady*," the scientist said. "And if I'm crazy I don't want to be cured, see?"

One of them stopped and looked at the doctor. Edwards shrugged. "Take us to Williams."

Evans and the doctor were carefully conveyed through the place to Johntha's room. The door was opened and they filed in.

Johntha was inert on the small bed.

Evans looked down on the silent man and uttered a string of curses.

"Electrotherapy puts them out for some time, you know," said Doctor Edwards shakily.

"Okay," said Evans. "If we can't do anything constructive *with* him, we'll do it *for* him. Get the stretchers and we'll hurry him back to the electric-surgical room at the hospital. Then you and I, Edwards, will wait for him to awake."

"How much?" asked Edwards of one of the attendants.

"The initial treatment. Mostly trial to set a threshold level."

THE medical man stared thoughtfully at the scientist. "There's hope," said Edwards. "Not much, but some. Trouble is that he's been shocked before, by the falling car-line feeder."

"Maybe that gave him a bit of immunity."

"I doubt it. But speculation is futile now. Evans, I'll do anything I can."

"Good. Let's try everything."

With a worried look on his face, Jim Evans watched the completely inert form of Barry Williams, harboring the intelligence of Johntha, lifted to stretchers, and carried to the ambulance.

Luckily, the original room was still vacant at the hospital. With Barry installed, Jim and the doctor started a long vigil. . . .

Hours later, Johntha stirred, at long last. "Wha—where—"

"You're awakening again," said Jim soothingly.

"Bu—I—"

"Easy, Barry. You're all right."

He looked up at them blankly.

"Remember the *Star Lady*?" prodded Evans.

"Yah—good ship. Wha—"

"The atomic engines?" asked Barry.

"Yah, the atomic engines. Burned up Shame."

"But you've got the answer."

"Ah—to whad?" came the thick reply.

"To the *Star Lady's* engines."

"Evans," said the doctor, "this is difficult. Electrotherapy at first makes memory difficult. Things decay quickly. A thought impressed upon the mind a moment ago is remembered sketchily as though a month or more had passed between then and now."

"And Heaven only knows how far back the *Star Lady* is?" growled Evans.

"I'm afraid so."

"It wears off?"

"The initial treatment is less rigorous. Perhaps in a few hours he may be able to think clearly again."

Barry stirred. "Engines," he said thickly. "Get to stars. Man—great man. Gave up his own chance and I've failed him."

"No!" shouted Evans. "You didn't!"

Edwards was puzzled. "He has a fixation on that. It is almost frightening. Yet it alone



might be strong enough to penetrate despite the treatment. Continue on that line, Evans."

"Anything you say, Doc," said Jim. Then to Johntha he said: "Force fields? Barrier potentials? Remember. The atomic engines?"

"Uh. Sub-ether force fields in engine. Something about Barry Williams. A fine fellow. Loves my sister. He—" but the man's voice trailed off again.

"Williams has no sister," said Evans positively.

"Then what is he talking about?"

"Perhaps," said Evans sharply, "this *Chonthrad* character—the one he's swapped minds with—has a sister!"

Doctor Edwards sat down weakly. "I can't believe it," he said.

"Can you believe the worth of a working science, completely against all Earthly techniques?"

"I'd prefer not to consider it too deeply," objected Edwards. "How can men change minds?"

"I don't know—nor care. Ask your brilliant Doctor Hammond."

"You're not being vindictive."

**J**IM EVANS scowled. "Look, Doc, this isn't hay we're playing with. I don't care a hoot whether Barry has swapped minds or what he knows is a first-class pipe dream, complete with a gawjuss gal to round out the little tale. All I'm interested in is the end-product. That's all anyone on Earth cares about. I'm in on the ground floor because I happened to hear Barry's mutterings and happen to be crazy enough to try it. So it works. Now I want more."

"Y-you—you've tried it?" stammered Edwards.

"Doctor, they didn't take off on four-hour spinal operations two days after they discovered anesthesia, did they? It wasn't Hertz or Marconi who started the first country-wide radio network. The Brothers Wright didn't accept their success at Kitty Hawk and then go out to fly the Atlantic Ocean. I've got a crude collection of cockeyed junk back in the laboratory that generates a wave of some sort. I have another collection of junk that detects it. Give a wild Hottentot a spark coil and a crystal detector, and he's got the rudiments of radio but he can't really do anything about it but tickle one and wonder why the other jumps. Yeah, there's math

and there's mutterings about barrier potentials and force fields but how does a man go looking for them in the dark? What lines do I follow?"

"I see. And you think that he knows the answer?"

"You bet he knows! And I don't care whether he dreamed it or is another man in Barry's skin—he's predicted a new science which has a sound basis of fact. I'm perfectly willing to assume that if his initial premise is correct, his more complex reasoning is at least entitled to rigorous and extensive investigation."

"I don't know what we can do, though," complained the doctor.

"Just this: the *Star Lady* is a large undertaking, large enough for me, or Barry, or any number of other technical supervisors on the job, to haul off and give orders of considerable magnitude, orders which must be carried out to the letter. I'm going to make an official request that you and your little brain-boy, Hammond, deliver Barry Williams to his laboratory in full possession of his senses within twenty-four hours!"

"It may be impossible!"

"Then," said Jim Evans with a superior look and a nice-nasty grating sound in his voice, "there'll be a devil of a lot of clever explaining to be done."

The doctor scowled. "High handed methods will not get you anywhere!"

"Doc, don't make me mad again," warned Evans. "As for high-handedness, remember the doctors were high-handed when they shoved him in the calabozo. Without authorization you medicos have no more right to tinker with the brain of a man like Barry Williams than you have tinkering with the mind of Sir Isaac Newton. Neither one of 'em thought conventionally. I'm going back to work. Call me if he gets lucid."

---

## CHAPTER XI

### *Deep Into Space*

---

**E**VANS left swiftly. Behind him, Doctor Edwards was beginning to perspire. Who could predict what kind of actions would be taken by brilliant, slightly unstable men? He wondered about Barry Williams. He'd never seen Williams when Barry had

his full faculties. Evans was quiet and easy going until he got steamed up, and from then on, Jim Evans was a wild man.

Doctor Edwards decided to let other shoulders hold part of the load, and he picked up the telephone and put in a call to Hammond. Maybe, he thought, he could pass a little responsibility along to him.

A week dragged by, and each day would find Evans at the hospital trying to urge Barry's mind into action. There was improvement, but it was desperately slow. In the laboratory, Jim lashed the medical men to higher efforts, all of them working strictly in the dark on trial and error and coming up with bits and snivets of truth.

A corps of trained mathematicians toiled over the inklings, trying to untangle the thin, frail line of truth from the tangled and many-ended skein of possibilities. Each fact unearthed in the laboratory was one more step on the right road.

Jim Evans came to this hospital daily, bringing each day some news, some hope, to goad Barry Williams's mind into action. They admitted to the patient that his supposed delusion had been true. They made profuse apologies.

The patient Johntha's, mind cleared slightly, but there was a haze that obscured the details, just as there was obscurity over Johntha's mind. On Earth, however, this failure to recall details was attributed to the impulsive action of hot-headed medicos and both Hammond and Edwards suffered the arrows of scorn.

Though still befuddled about the sub-etheric waves, Johntha returned to his job. Since his job apparently depended upon the development of the sub-etheric wave mechanics, Johntha worked with Jim Evans.

He contributed little but facility and dexterity. No originality.

Yet he was more than helpful, for with his arrival, the trial and error process of untangling the facts became easier. Each step and each try was completely outlined to Johntha. Then they would look expectantly at Johntha, who would sit and try to remember. In many cases he would say a definite "No" and the group would outline a next step. When he said "yes" or "maybe" they would perform the experiment and see for themselves.

He was responsible for mountains of equipment, and upon his uncertain knowledge went the word to spend time, money

and material.

The months flowed past, and each day saw Terra closer to their success. Johntha still lagged, but he had that which Barry Williams on far-off Tendra did not have—Johntha had the confidence of his contemporaries. They were working on his theory. He had the opportunity of studying as they acted, and study he did, diligently. He lagged, but he learned.

Jim Evans uncovered the facts about the force fields, and the *Star Lady* project took shape. Jim's assistant located the hidden knowledge of the barrier potentials and they were applied, haltingly at first but with firmer decision as time and experience went on.

It was a twofold project. As developments came, they were entered simultaneously in the project to reach the stars and a project to communicate.

And so passed a solid year.

Not too long after that year was marked off, Johntha, Jim Evans, and a corps of assistants huddled down behind a massive barrier, looking through telescopes at the test-stand a mile across the desert. Jim Evans was pouring the power in, and Johntha was reading meters and making recordings.

**G**RADUALLY the power input rose bit by bit as Evans notched it up, and as the critical level was achieved without stability, then exceeded, and surpassed to a hundred percent factor of safety. Evans took a deep breath.

"We've made it!" he shouted, cutting the power. "We've made it!" He went into an Indian war dance and finally grabbed Johntha by the hands and whirled him around and around. There were cheers from the crew and men congratulating one another.

But Johntha was not too elated, and when Jim Evans' own enthusiasm died slightly, he noticed the sober face of his friend.

"Hey, Barry! We're a howling success. Cheer up, man!"

"It's not fair," muttered Johntha.

Evans sobered instantly. "What isn't?" he demanded.

Johntha smiled wistfully. "Remember what this has all been based upon?"

Evans nodded. "The stuff you told me on that first day after the accident."

Johntha nodded glumly. "I told it to you before I went out, in mind, met the real Barry, and was sent back by him."

"Great guys, both of you!"

"But you don't understand. Earth would have achieved this if Barry had returned at that time. When he sent me back, you were already experimenting, and our work was really over. I've been of help, but far from indispensable."

"And?"

"Had we known, Barry's mind would not be inhabiting my body. Earth would have achieved the stars anyway, and perhaps—well, who knows how far my home planet is from here?"

"I understand," said Evans quietly.

"Look, fella. You and I are going out to look for it!"

The days sped swiftly, now, for there was far too much to do. The entire crew went on a sixteen-hour day and a seven-day week, catching sleep when they dropped in their tracks and eating when a tiny breather broke their day.

Jim Evans was tireless, and Johntha went around somewhat helplessly trying to assist. Johntha knew that his job should have been the atomic engines. On straight theory, he was using the right mind, but when the addition of the sub-etheric waves became necessary, his Trendan knowledge had suffered, and he was forced to rely upon Jim Evans' help.

Evans was also running the project of setting up the communications. And Johntha's mind was convinced that all Earthmen were inclined to let nothing stand in their way.

Then at last the *Star Lady* was ready—an erect prolate spheroid of shimmering metal standing on the spaceport awaiting the hand of her master. They entered the ship, and Johntha paused to look at the bronze plaque beside the door. Some attributed this scrutiny to Johntha's personal pride, and few knew that he was paying tribute to the man in whose body he—Johntha—lived.

They entered the ship and closed the door. Then before the eyes of a million people and the lenses of a thousand cameras and iconoscopes, the *Star Lady* disappeared. A swirling column of dust raced in and followed the invisible ship high into the air, and even out into space itself.

A year later they found a discarded candy wrapper in Iran; a scrap of a California newspaper in Siberia; and some semi-tropical leaves—quite dead—on the ice-cap of Antarctica.

Up into space she went and into the black-

ness. Earth dwindled from a sphere into a lost mote in the distance, and the scintillating sun dwindled in minutes to where they could look into its disc without harming the eyes. Then it blacked out, disappearing with the rest of the stars and the *Star Lady* was arrowing through the vast reach of interstellar space. Time became meaningless as the velocity of the *Star Lady* mounted upwards into the unthinkable velocities that could only be expressed in multiplied functions of the speed of light.

**H**OURS later, Arcturus streaked past at less than a billion miles. It was a long, almost instantaneous flash, that extended from far ahead to far behind in an insignificant fraction of time and then was gone.

More hours fled by and other stars made their streaks against the sky. Then, satisfied, the *Star Lady* decelerated and came to a relative stop, floating in the void many light years from any star. Her speed was approximately zero with respect to Sol. For the rest, they did not care.

"Now," said Jim Evans, "Let's call home and tell 'em we're cooking with helium!"

Tom Adler grinned and fired up the sub-ether communications job. He toyed with it a bit, and then the tuning indicator illuminated brilliantly.

"Go ahead," he said to Jim. "Have the dubious honor of being the first character to shoot the breeze over a few hundred light years."

"Thanks," drawled Jim. "Shall it be 'What hath God wrought' or 'Guess who I am?'"

"Make it—huh, what's that?"

"Sounds like chop suey to me. Are you on our right band?"

"What's the right band?" asked Adler. "I'd like to know more about this stuff before you tie me down and take to quoting me."

"Well, is it tuned properly?"

"The indicator says we're on a transmitting station."

"Shut up," said Johntha. He listened. The sounds were familiar, and they entered Barry's ears, bypassed Barry's brain, and came to complete understanding with the mind that lived there.

"To Perdition with History," he repeated in English after Johntha had spoken his un-historic words.

"That's what I've always said," grinned



Evans. "But what—"

"That's—my home planet," Johntha said slowly. "Barry's mind did finish my job—on Trenda."

"Um! Sure?"

"I know my own language, don't I?"

"Ought to."

"Can we answer 'em?" asked Johntha.

"We can fling out a signal, but unless they're listening to this band, we might as well whistle into space. Go ahead."

"Barry Williams!" called the man into the microphone. "Barry Williams, this is the *Star Lady*!"

They listened, but there was no break in the conversation. "Barry Williams!" called the man again. And again; and again and again.

"Look," said Adler. "Maybe you can understand their chop suey. D'ye expect them to understand yours?"

"One of them will," said Barry.

Jim Evans nodded bleakly. He—understood, finally. He believed, and the evidence hit him with as much force as any physical blow.

Then Johntha said hopelessly, "They're all set up for commercial interplanetary communications. They'll not explore the entire spectrum. Can we match their band?"

"Not from out here. It'll take a re-design job on the transmitter."

"Oh," said Johntha sorrowfully.

"But, blast it, Adler! Slap the direction finder on them! If we can't talk to 'em by 'phone, we'll track 'em down and make 'em listen to us face to face!"

"Check!" said Adler.

---

## CHAPTER XII

### *Fusion Of The Minds*

---

**H**ASTILY HUNTING around, Jim Evans found a small model of the galaxy.

"This thing has all the precision of a two-dollar spectroscope," Adler growled. "How many light years' error in two percent accuracy is possible from a galactic scale model?"

"Triangulate us into the volume," said Johntha. "From there on, we'll be in fair shape."

"Okay. Evans, here's the first line. G-Twenty-seven; declination south, twelve degrees; Azimuth, one four three; point, two-two-seven. Subtract whichever is the larger—"

"Income tax lizard," growled Evans, running the line through the model.

The *Star Lady* turned on her minor axis and fled at right angles to the previous line of direction. An hour—two—three she sped at many times the speed of light. Then decelerated to stop and make another "fix." A third vector was added to the first two, and the resulting lines enclosed a small volume. Pointing her head down on the last line of the direction, the *Star Lady* packed on the acceleration and arrowed toward Trenda.

More time passed in headlong flight. Then—

Jim Evans scratched his head. "So we're here. How do you make a door to door canvass of a stellar system when no one speaks their language, and only one guy understands theirs?"

"You forget," Barry said with a smile. "This is my home. Follow me!"

Evans looked about the ship. "Uh-huh," he grinned. "We'll be in a mess if we don't. Whither away?"

Across the system went the *Star Lady*. Down upon the third planet it dropped, and it streaked across the sky until Johntha pointed down.

"Right in that back lawn," he said with a chuckle.

The *Star Lady* landed gently. The landing floods burned the scene into almost-daylight, and Johntha and Jim Evans got out of the ship.

"Home!" said Johntha.

"Stop it," said Jim. "You're making my head spin."

"Your head?" asked Johntha solemnly. "Stick around, fella. I'm about to shake hands with me!"

On Trenda, Barry Williams had awakened, vaguely troubled, vaguely expectant. Something was about to happen. Bad? He didn't know. Good? He could hope so. But bad or good or indifferent, there was tension—undefinable—something unknown charging the air? Barry did not know what it was.

For the first time since that day so long ago, he missed the opportunity of smoking.

He arose and went out to the library, uncertain of what he wanted. He snapped on a small light and looked at the backs of books.

He was unimpressed, uninterested in any that were there. He went into the kitchen and raided the refrigerator idly, toying with the idea of really setting up a minor meal. That did not interest him too much either. He—heard a noise and turned.

"Vella," he said.

"What's the matter?" she asked.

"I'm vaguely troubled."

"Over what?"

"I don't know."

"An unrest, a worry?"

"Something of that nature," he said to her.

"Anything I can do?"

"I don't know. I'm bewildered."

"Can't sleep?"

He shook his head.

"Might take an opiate," she suggested.

"Afraid to," he laughed nervously. "I might miss—"

"Miss what?"

"Whatever is about to happen."

"Is something about to happen?" she asked, wondering.

**H**E PUT both hands on her shoulders, and said, "Vella, have you ever felt a foreboding about the future, and you didn't know why?"

She nodded.

"Well, that's it!"

"But what can we do?" she asked.

"There's no use in sitting around waiting."

"Vella, whatever happens from here on in, I want you to know that I—"

Lights blazed outside, illuminating the neighborhood. It was as a sudden flash as of lightning, and if there were no sound, Barry's mind supplied the blast of thunder. He forgot to finish what he was saying. He leaped to the window. Then to the door at full speed.

The scene before him struck home. The *Star Lady* surrounded by the diaphanous veil of her own flood lights. He stood in the doorway breathing deeply, his throat choked with emotion. His eyes smarted and tears welled and ran down his cheeks unnoticed.

"Johntha," said Vella, frightened. "What's that ship?"

"This is it," he said in a choked-off tone.

"Barry Williams!" called the foremost figure.

"Johntha!" replied the man in the doorway.

"Johntha, who is that?" breathed Vella.

Trendan and Earthman faced one another uncertainly. "You did it," said the man in the doorway.

The new arrival nodded. "It was not all my doing," he said sadly. "Jim Evans got the details—the evening before you sent me back!"

Evans shook his head. "You shouldn't have dropped that so suddenly," he said.

Vella looked from one to the other. "You—you understand them?"

Her supposed brother nodded. "I understand them—and he understands us."

The newcomer nodded at this.

"You understand me?" she demanded of the Terran.

Again he nodded.

"Can I understand you?"

A shake of the head.

"But who are you?"

Her supposed brother turned, but the stranger said: "If she does not know, wait."

"But why should I wait?"

"Wait for what?" asked Vella. She looked at the stranger and smiled. Barry saw that smile and it hurt. He should be in his own body. Then—but how could it be accomplished.

"Well," said the stranger, hopefully, "we're both famous even if we are a little mixed. I congratulate you!"

"You've done a grand job, Johntha."

Vella took her supposed brother by the shoulders and turned him to face her.

"Just who are you?" she demanded. "You call him Johntha. He understands me, and you understand both of them. Now explain."

"Inside," said Barry, and Johntha translated for the other Earthmen. They all entered the house, and Johntha roamed about the place with easy familiarity.

Then Barry Williams explained, completely, and fully. He omitted nothing, and found that his verbal inertia, once started, swept him through the details of his own feeling for her, through his own fears and heartaches over the *Star Lady* and his worry about the loss of memories. He spent a solid hour at it, and when he was finished, he sat back and said, glumly:

"Now we're finished. A success. Now what?"

**B**ARRY got up from his chair and went to the door to look once more at the

*Star Lady*. Now, he thought foolishly, he could find out whether the shutters were hinged from above or from either side.

"Look, fella," said Johntha. "There must be some way."

"You name it," said Barry, still looking out of the door with his back to them.

Jim Evans grunted in embarrassed emotion. Here were two of the finest men ever created, caught in their own desire to do right. And between them was a woman, equally at the odd ends of an emotional tangle. For the man she could marry wouldn't treat her in any way but as a brother, while the man who loved her was similarly bound.

The Earthman arose from his easy chair and went over to stand beside the Trendan. "I'm—deeply concerned, Barry," he said.

"So," said the other man, "what can we do about it?" He gave a sour smile of resignation and then looked at the *Star Lady*.

"You did a wonderful job."

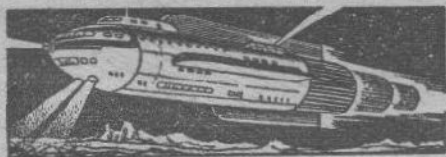
"Me?" exploded the Terran. "Barry, that's all yours." He slapped the Trendan on the shoulder affectionately.

The contact did it. Both minds were in wrong bodies, and like a captured proton, imprisoned in a potential well, each mind had a definite probability of escape which would reduce the overall potential. Like the twanging of a string, the contact reduced the confining potential of the wells, and the minds, each with greater binding force for the proper body, snapped into their proper places.

At once, Johntha was Johntha and Barry Williams was Barry Williams. They turned back to the other men, and in their faces was the truth.

Jim Evans looked and shook his head gladly. "Well," he said, "we've lost an interpreter."

But the two that really counted did not need an interpreter.



## Forecast for the Next Issue

**W**HEN a couple of exiles from the Space Marines and a group of plant men from Mars and Velos get together, MR. ZYTZT GOES TO MARS in the amazing novel of that name by Noel Loomis. An extraordinary bird's-eye view of the future—in a scientific treat par excellence!

**O**OPS! The weather again! But—it's June in January in CLIMATE, INCORPORATED, by Wesley Long, when young scientist James Tennis takes the matter in hand in one of the cleverest novelets we've ever offered you!

**N**OVELTY is the keynote of William Tenn's novelet, THE IONIAN CYCLE, also featured next issue, in which a little knowledge of the facts of life on Earth helps a space crew stranded on a satellite. You'll find this a space-exploring yarn which is truly "different."

**D**ID you know that certain inanimate objects have memories? So many scientists believe—and this thesis is the inspiration of a grand novelet, MEMORY, by Theodore Sturgeon, which completes the roster of next issue's headliners.

**E**NTERTAINING and unusual short stories, by some of your favorite writers, will, of course, be added to round out an exceptional number packed with distinguished fiction from cover to cover!

**R**EADERS, as usual, will have their say in the department—THE READER SPEAKS—a feature which is constantly growing in popularity. All in all, our next issue will be one well worth while—look forward to it!