PAPPI

by Sheila Finch

THE FIRST THING TIM NOTICED WHEN HE ENTERED HIS OLD home was the visorphone in the hall flashing to warn him of an incoming call. It had to be for Karin, of course. But who wouldn't already know she was dead? Karin didn't have a very wide circle of friends.

The visorphone's shrill call noise was irritating. He was tired from the shuttle flight, obscurely annoyed by the obsequious robot attendants, and feeling the pull of Earth's excessive gravity already. He punched the receive button. The operator's voice instructed Mr. Tim Garroway to stand by for a call from Mr. Howard Rathbone III.

Too late to worry about how Rathbone had figured where he'd be going to in such a hurry. He wasn't cut out to play James Bond games, but he'd felt confident that Earth was the one place Rathbone would never think of looking for him if he made a run for it, since it was where Rathbone had wanted him to go. Obviously he'd under-estimated the man.

While he waited for the connection to be completed between Earth and the space station up at the Lagrange point that was Rathbone's corporate headquarters, he glanced through the doorway into the living room to see what Beth was doing. She was sitting cross-legged on the rug, building a tower of books, her small plump face raised to the warm spring sunshine that flooded in through the undraped window. Sunlight sparked her curls to gold, and Tim's heart lurched as he saw for the thousandth time how like her mother his little daughter was.

If only Sylvia could've seen her now.

If only the damned emergency-team robots had functioned as they were supposed to.

He'd gone over and over the options on the shuttle trip from the moon. There weren't very many in his favor. Running had been an impulse that he'd begun to see might cause him a lot of nasty problems. He waited sullenly for the phone link to be completed.

The visorphone crackled, pulling his attention back, and the screen cleared. Howard Rathbone III gazed at him from the elegantly paneled office where he kept the helm of his billion-dollar enterprises. Tim had speculated once, on first seeing this magnificent room, how much it had cost to lob all that rare and expensive teak and mahogany and rosewood into space to reconstruct the look of a luxury ocean liner from the 1920s. Sylvia had giggled at his estimate. "Way, way under!" she'd said.

"Tim. You and Beth had a pleasant shuttle trip, I hope? Of course, you should have consulted me before you took the child along."

So the old man wasn't going to call it kidnapping just yet. Mr. Rathbone was a big man with a big man 's hearty voice and manner. And a heart made out of pure moon rock. Obviously he figured on gaining some advantage from playing along with Tim.

"Fine, thanks, Mr. Rathbone. I would've called you to—"

Rathbone overrode his words. "You and Beth will need some time to recover. Tomorrow will be plenty of time to do what we talked about. You will do it, of course. You have so much to gain!"

Uneasily, Tim considered how often the man seemed to read his mind. Or was it just that he himself was totally predictable, at least where Mercury Mining and Manufacturing was concerned? Maybe Rathbone was right; there was too much money involved to be squeamish, enough to buy Beth everything her heart desired now and for a long time to come. And was the price really so unreasonable?

"I'm relying on you, Tim," Rathbone said. "Triple M's future is in your hands. But I'm confident you'll come through for us."

Even when he was handing out praise and flattery, Rathbone's words came out as orders. That was why he'd been so phenomenally successful, building his huge empire in less than two decades since the Second Mercury Expedition.

"Yes, sir."

"I'm a reasonable man, Tim. I'd like to have your willing cooperation. So I'm prepared to explain it all one more time. We must stop this now, before it goes any further. No telling what'll happen if he gets away with it. Do you understand my position, Tim?"

Tim nodded, his throat dry.

"We can't have all those machines out there thinking they're entitled to rights and privileges same as humans. And they will, you know, if he gets away with this."

"Yes, sir."

"You're a bright man. But you've been squandering your talents."

Not half as vicious as the things he'd said about Tim when he'd first learned of Sylvia's marriage to a penniless student, and her pregnancy, Tim thought. But if he played his cards right...

Rathbone leaned back in his leather swivel chair, steepled his fingers, and gazed at the father of his daughter's child. On the wall behind him a map of the inner solar system showed the Rathbone empire in scattered twinkling lights. "I have no heirs except for little Beth."

Tim swallowed. His hunger to own and control what the map represented fought another battle with the cautious part of him. The outcome was indecisive again. Yet each time, the hungry side of him crept a little closer to victory. Especially here, in this house.

"I still wonder if it wouldn't be better to try public exposure," Tim said. "You know—subject him to public scrutiny—put him through tests he can't pass—"

In the delay that followed, he knew what Rathbone's answer would be.

"That's been tried already!" Rathbone scowled at him across space. "And failed. There's no time left for pussyfooting here. He has to be removed. "

Tim shrugged uneasily.

"It's not like killing a man, Tim. Stephen Byerley's a robot!"

Rathbone spat the word out, loaded with all the contempt, the hatred, and the fear Tim knew that he felt for robots.

"Sleep on it, son," his father-in-law said. In spite of the term he'd used, the threatening tone came through clearly. "I should think the consequences if you fail easily outweigh the demise of one robot."

That was the other factor in the equation. If he refused to do what Rathbone wanted, then Rathbone would take Beth away from him. He couldn't go back to the moon or the space station, and he sure couldn't stay on Earth any more. There was no place he could hide that his father-in-law's thugs couldn't find him. And he certainly couldn't take up the freelance life of an asteroid prospector, not with a three-year-old to raise.

The visorphone screen clouded over, and Tim turned heavily toward the living room to retrieve his daughter.

He had to agree his father-in-law had a point. Stephen Byerley had managed to get elected to public office a month ago. It was the beginning of the end of uncontested human superiority, despite the much-vaunted three laws. For one thing, Mayor Byerley might start thinking his "brothers" in space, those who toiled under horrifying conditions on blistering planets for industrialists like Howard Rathbone III, deserved better conditions. Byerley might even decide they were being treated like slaves and use the weight of his office to start a campaign for their emancipation. It was ludicrous, of course, but Tim understood that once you set the precedent of one robot being "human " enough to hold human office, then you were going to have a hard time denying the same rights and protections to all the others.

It wasn't that he had much sympathy with the metal men. They were, after all, only machines. Nobody was more convinced of that than he! He'd had a long, intimate association with one of them going all the way back to 2009, right here in this house.

"You wanted a father, Tirilmy," Karin Garroway said brightly. "Well, I've brought you PAPPI."

Timmy stared at the gray metal box on wheels squatting in the precise middle of the living room rug. At first glance, he'd thought it was an old-fashioned canister vacuum cleaner minus the hose. Four skinny

appendages protruded from its sides, ending in a collection of hooks and pincers like some grim skeletal joke. An upside-down bowl-shaped turret housed a camera lens and other things he didn't recognize right away.

Timmy touched a wheel housing with one toe.

"Treat it with care." Motherly chores satisfied now, Karin gathered up papers and laptop computer and stuffed them all in her briefcase.

"What is it?"

"PAPPI—Paternal Alternative Program: Prototype I."

"Looks pretty stupid," Timmy said.

"Never mind how it looks!" His mother glanced at him. "It'll do everything a real father can do. PAPPI can pitch baseballs, and sort your stamp collection—all sorts of things."

"Can it do my homework?"

"It has programs to *coach* you in math and reading, Timmy. PAPPI has tapes of bedtime stories selected for eight-year-old boys, too. And we'll update them as you grow."

"Sometimes I want to talk about man things..."

"Don't be difficult." Karin snapped her briefcase crisply shut. "I'll work on some of the refinements as I get time. You could think of this as an experiment in robotics that we're doing together."

Karin was always trying to get him interested in her work at U.S. Robots and Mechanical Men, Inc. She put the briefcase down on the sofa, hunkered down in front of her son so her eyes were level with his and held him by the shoulders. Her face had that soft, gentle haze Timmy saw on it sometimes when she looked at kittens or butterflies. He stared back at her, his mouth drawn tightly down.

"I know it's hard on you, the way we live."

"We could do it the way other people do!" he said sullenly.

"That just won't work for me," she said. "I thought you understood that. Look, you keep saying you want a father—"

"A real one. Not a dumb robot."

Her face closed over. "I've explained to you that we don't have time for a man in our lives. "

Timmy didn't know anything about his real father. Karin had told him some stuff once about a place where they sold sperm from fathers for people who wanted to be mothers without all the fuss. But Timmy told everybody his dad had died; it was easier to explain. Maybe Karin didn't like men very much; she never brought one home, unlike his best friend Joey's mother, who had lots of boyfriends. Sometimes Timmy wondered if Karin wouldn't like *him* when he grew up, too.

"Timmy?"

"All right," he said reluctantly. "But you promised me we'd go to the zoo today, Karin."

She chewed her lip. "I know it's Sunday, but the project's so urgent."

He shook his head. "Today's special. It's—"

"You can play with PAPPI in the yard. You'd like that, wouldn't you? PAPPI's easy to use, I made sure of that."

He looked past her at the robot. "What can you play with a thing like that?"

"You'll think of something!" She gave him a kiss on the cheek which he wasn't quick enough to duck. "Now I've got to run. The lab's aircar is waiting for me. I promise I won't be too long."

After she'd gone, Timmy watched the Tri-D for a while, but Karin had programmed it to show him historical films about the exploration of the solar system and educational stuff about astronomy. He turned the Tri-D off again and squatted down by the robot. He stared into its camera eye.

"You're dopey looking!" he said. "Got a dopey name, too."

A bird chirped outside in the big tree in the garden, but inside the house it was very quiet. Timmy suddenly felt lonely, which was strange because now that he wasn't such a little kid any more Karin often left him alone when she had to work overtime or go in on weekends. The reason wasn't too hard to find.

It was Father's Day. The Cub Scout Troop that Timmy and Joey belonged to was having a father-and-son hot-dog barbecue in Central Park, and absolutely everybody would be there with their dad. All Timmy's friends had fathers, even if they weren't the original ones. And Joey would have one of his mom's boyfriends along.

But Timmy had known there was no point in telling Karin about it. Karin didn't believe in men-only activities. It would've been just like her to consider going with him to a father-son barbecue. Much better to stay home with a robot than be embarrassed like that. Timmy scowled at the robot. Nothing else to do—he might as well turn it on. The switch was conveniently located near the top. Immediately, a small red light glowed on the dome, which swiveled to focus the camera eye on Timmy.

"Hello," the tinny, uninflected voice said. "I am PAPPI, your Paternal Alternative. I am an experimental prototype."

Surprised, Timmy settled himself cross-legged in front of the machine and stared at it. He'd seen robots before, of course, at the lab where Karin worked. But he knew a lot of people didn't trust them and wouldn't allow them in New York. The ones his mother built that talked were huge things to be sent out into space where they couldn't frighten anybody.

"Well," Timmy said cautiously. "What can you do?"

"I can tell you a story about animals. I can help you with your stamp collection. I can make model airplanes. I know baseball and basketball statistics for the last fifty years. I can tell you who scored the most home runs, who was the MVP, who—"

Timmy was astonished. Perhaps Karin understood more than he'd ever realized about what was important to him. "Can you help me light a fire in the backyard and barbecue hot dogs?"

"I do not think Karin would approve of you playing with fire."

Timmy's enthusiasm faded. "So you're going to be another babysitter!"

"You are too old for babysitters, Timmy. I am your PAPPI, and Paternal Alternatives do not—"

"You're not my dad!" Timmy snapped.

"Shall we go out into the yard and play baseball?" the robot suggested.

"Sure." Timmy stuck his hands in his pockets.

Timmy found out right away that PAPPI was very good at pitching balls. The long metal arms grasped the ball neatly and swung it in an economical arc, releasing it at precisely the right moment to travel across to the exact spot on Timmy's baseball bat for hitting. PAPPI gave him advice on how to hold the bat too, but it never yelled at him when he missed, and it wasn't a sore loser like Joey when Timmy managed to hit a "home run."

"Hey," Timmy said after an hour of playing World Series. "Want to climb a tree?"

"I am not equipped to climb trees," PAPPI replied. "But I will watch you. And I can identify the objects you encounter."

Timmy threw down the baseball bat and shimmied up the trunk of the old maple by the garden wall. PAPPI trundled over to stand underneath, the dome swiveling so the camera eye could focus on Timmy's ascent.

Halfway up to the crown, the main trunk forked. Here Timmy and Joey had once started to erect a fort. Then the weather got too hot for carpentry projects and they'd abandoned it. But it was still a fine place to sit and look at the jagged skyline of the city across the East River. The leaves overhead made liquid patterns of sunlight and shade on his bare arms, and their soft rustling was like a kind of secret language that only Timmy was meant to understand.

Timmy straddled one of the sun-warm planks.

"You look weird from up here!"

"Have you noticed the abandoned bird's nest by your right hand?"

Timmy peered into the leaves. Sure enough, there was a jumble of twigs and mud stuck to the bark near the trunk. "There's feathers in it."

Timmy hung on to the branch with one hand and leaned down, tiny brown and white feather in the other. PAPPI's camera eye slid out on a slender stalk for about a foot, then retracted.

"A very fine specimen. But look at the small white growths on the tree trunk, a form of fungus, division name Mycota. The spores have been carried up there accidentally by a bird, perhaps by the *Passer domesticus* whose feather you are holding."

"Huh?"

"A house sparrow."

"Neat!"

"There are about fifty thousand fungi, or saprophytic and parasitic plantlike organisms, that have been identified and described. But there are probably a hundred thousand more. They include mushrooms, mildews, molds, yeasts—"

Timmy frowned. The thing was starting to sound like his schoolteacher.

"I can tell you about lichens too, if you want me to."

"Not hardly!" Timmy said.

"Well, then," the robot said. "Would you like to play horse?"

"How do I do that?"

"You can ride around on me. I am very strongly built."

So Timmy rode around the yard on top of PAPPI, held in place by two of the long metal arms, shouting "Giddyap!" and "Whoa!" until his throat was scratchy. It was almost possible to forget PAPPI was a robot and imagine he was really riding a stallion with flowing mane across a Western mesa, just like the programs on the Tri-D that Karin frowned at him watching.

By the time the sky got dark and Karin came home again, Timmy knew he'd discovered a real friend, one who never grew bored with playing, never thought any question too stupid to answer, never criticized or blamed.

But it wasn't the same thing at all as having a real father.

With PAPPI's help, Timmy did better in school that year. PAPPI was programmed to learn too, right alongside Timmy, so that made a contest out of it—one PAPPI usually won. But since the robot never boasted of its success, Timmy really didn't mind. And four mechanical hands meant the robot was a real wizard at assembling model spaceships and shuffling playing cards or juggling balls.

From time to time, Karin brought new programs home for PAPPI as they developed them at the lab. Timmy watched when she took the robot's "head" apart and inserted them. Sometimes he held the tiny tools she used to work on the positronic brain. Afterward, PAPPI could do a lot more things to entertain Timmy, like playing the banjo, or telling jokes and drawing silly pictures to make him laugh.

Karin rarely brought anyone home for supper, not even people from U.S. Robots. But once, a lady she shared the office with came to Timmy's house.

"It doesn't look a bit like a mechanical man," Timmy complained.

He and this fierce-looking lady hunkered down on the rug to look at PAPPI, who had just slithered to a halt in front of them. The robot's wheels scuffed the polished floor as it braked.

"It doesn't need to," Karin's officemate replied. "Form should follow function."

"At least it could've hag legs, not wheels!" Timmy said, fingering one of the scratches in the wood.

"This was meant to be a utility robot. Your mother modified its brain, not its body."

Karin had told him that Dr. Calvin didn't *build* the robots quite like she did; Dr. Calvin was a robopsychologist, whatever that meant. In the kitchen, Karin, in an uncharacteristic display of domesticity, clattered dishes into the dishwasher.

Timmy frowned. "PAPPI thinks it's more than that!"

"But you don't."

"How can you tell?"

Dr. Calvin didn't answer. She was about as old as his mother, Timmy judged, and neither of them

wore lipstick or smiled as much as Joey's mother did.

Karin bustled back into the living room with a tray of pastries she'd bought at the store. "Anyone ready for dessert?"

"I do not think Timmy should have any more sugar in his diet today," PAPPI said. "By my count, since getting up this morning he has consumed—"

"Oh, shut up!" Timmy said.

"Well," Karin began, "if you think—"

"One of these days, you 're going to have trouble with that one," Dr. Calvin said thoughtfully.

For a moment, Timmy thought she was speaking of him. But her eyes were on the robot squatting between them on the rug.

"I'm being very careful, Susan," Karin said. "And Timmy knows not to take the robot outside."

"I can't tell my friends about PAPPI, either," Timmy grumbled. "When Joey comes over to play I have to put PAPPI in the closet. And Joey's my best friend!"

"That's good to know, Timmy," Dr. Calvin said. "But antirobot sentiment isn't all I was referring to. Though goodness knows the Fundies are enough of a threat to our work."

"Then what?" Karin said.

"I don't think we realize yet what these positronic brains may be capable of someday."

"I'm not that good, Susan," Karin said, laughing. "Not like you!".

The talk turned away from robots after that.

Then one day when they were in eighth grade, Joey's mother got married again, and his new father took him on a trip to the moon.

"Why can't we go to the moon, Karin?" Timmy demanded as Karin frowned at some work she'd brought home from the lab.

"Hmm?" She gazed at him over the top of the glasses she'd recently started wearing.

"I want to go to the moon. See the craters."

"We can't afford it."

"I've got money saved up!"

"I can't spare the time right now. Things are really busy at U.S. Robots. Susan and I may finally be getting our own offices!"

"If I had a father..." Timmy began darkly.

Karin set her notes down and gazed at him. "I'm sorry you're still feeling a lack, Timmy. I'd hoped PAPPI would fill it."

"Seems like I don't have a father or a mother" Timmy said.

The following year, Timmy took a class in physics at Karin's urging and learned that he hated the subject. He became interested in sports, grew three inches, and discovered girls—one in particular, a dark-haired lovely with big breasts. PAPPI explained how to handle the sudden rush of hormones and awkwardness Timmy was feeling. Karin had done her part earlier, lecturing Timmy on the birds and the bees and the whole ecology of flowers, a discussion that bored him and left him feeling as if either he—or Karin—had totally missed the point. But PAPPI explained about Romeo and Juliet, whether it was a good idea to kiss a girl on a first date, and what to say to the other guys afterward.

In an attempt to influence him to take an interest in science, Karin bought him a telescope kit, and PAPPI helped him assemble it. PAPPI knew the names of all the stars and constellations they could see through the lens, and pointed out some of the orbiting space stations as well. Karin pretended not to notice when they stayed up well past Timmy's bedtime.

Timmy went out for the school swim team. PAPPI listened to his bragging and sympathized when he lost. Timmy changed his name to Tim, and PAPPI, unlike Karin, never made a mistake after that. All in all, it was a good time.

But Joe got to have man-to-man talks with his new father.

Tim activated the visorphone again and made an appointment to see the mayor, Stephen Byerley. Then he tried to put the whole thing out of his mind.

He'd forgotten Karin's house was so small. He went through the rooms methodically, making lists of what to dump and what to pack. There wasn't too much of the latter. Living quarters on a space station were small, but at least there was a sense of the vastness just beyond the screened walls. This house was a box, a tract house thrown up by greedy developers, cutting up the land that had once been countryside around New York City into smaller and smaller parcels. He remembered how Karin had explained to him that they couldn't move farther out because she needed to be near U.S. Robots. By then, Joe and his parents had moved to a large house on Long Island where there was room for a swimming pool and a tennis court. And they could keep dogs. Tim remembered how he'd hated U.S. Robots when he heard about the dogs.

Beth deserved better. Tomorrow he'd meet the man Rathbone wanted him to kill.

The weapon one of his father-in-law's ex-boxer bodyguards had given him weighed heavily in his pocket. Something to make hash out of that obscene positronic brain, Rathbone had said. For some reason he'd brought it with him when he Bed. Maybe even then he'd known he couldn't really get away so easily.

He had to stop thinking of Byerley as a man. It was only a robot they were talking about, after all. Only a robot. That would become obvious in the inquest. Then there'd be public outrage at the revelation of the stupendous hoax. The "assassin," if he were to be caught, would be released, a hero. Only of course, Rathbone would see to it that Tim wasn't caught.

And in return, Tim would get a chance to have something he desperately wanted, namely a large share of Mercury Mining and Manufacturing.

There was a good chance Byerley wouldn't keep the appointment anyway. His secretary had seemed doubtful the mayor would find time in his schedule for the vague reasons Tim had given her. Maybe nothing would come of it at all and he'd be off the hook. "Couldn't get near him, "he'd tell Rathbone. "Not my fault!"

His future and Beth's were on the line. He'd either have the money to be father and mother both to little Beth, or they'd both be on the run from Rathbone for the rest of their lives.

"You have to think about your life. You need to make plans for the future," Karin said, some time in '18. "What subjects are you interested in pursuing for a career?"

Tim leaned back in his chair and put his feet up on the table. He was in a truculent mood. "I don't know. Something that pays well. Probably sports."

"Sports?" Karin frowned. "How're you going to make a living from sports?"

Swimming had developed Tim 's muscles enough to make the girls eager to go out with him now. Heady stuff. "The University of Hawaii has this great program—"

"I'd like to see you go into robotics," Karin said. "The space colonies have a tremendous need for people like you."

"Aw, Karin!"

"If I may interrupt," PAPPI said. "A good liberal arts college will allow Tim to put off crucial decisions for at least another year without penalty."

"You're vetoing robotics?" Karin bit a fingernail. Tim noticed for the first time how much gray there was in her hair. She never colored it the way Joe's mother did.

"No, I'm only suggesting he might broaden his education first," the robot said.

Karin considered this. "I'm not going to pay for a college on the other side of the planet!"

"That's hardly fair of you, Karin," the robot said.

"I can't afford to pay if he goes out of state! Do you think I'm rich or something? And Timmy's hardly going to get a scholarship."

"There could be some financial assistance available—"

"Timmy's all I've got. I'll miss him!"

"I love him, too," PAPPI said.

Karin was suddenly very still. "What did you say?"

"That his absence would be noticeable to me, too," the robot said cautiously.

She stared at the robot for a long moment. "What other feelings do you have, PAPPI?"

Untypically, the robot seemed reluctant to answer. "What did you expect, Karin, with all the special Calvin/Minsky subprograms you've given me over the years?"

"But it's never proved out in the lab. Susan says—"

"What're you talking about?" Tim interrupted.

"Positronic sentience," Karin said slowly. "I'm just wondering if PAPPI—"

Exasperated, he said, "Well, of course PAPPI's alive! I thought we were discussing my future?"

Karin looked as if she were watching something very far away. "I'll have to take you back to the lab, PAPPI. If this is for real, then Susan will want to run the Turing series on you."

Tim stared at his mother. She chose the worst moments to get all wrapped up in her work. "Look, I've got a serious decision to make here."

"We've had no evidence for the development of full self-awareness in the lab," Karin said thoughtfully. "As an extended function of advanced positronic intelligence, that is. My guess would be it's prolonged exposure to humans in a real family situation that's caused the difference. But I'll have to talk to Susan about it. We'll need to do the research. "

"I don't want to go back to the lab" the robot began.

"I don't see a choice, PAPPI. This is big-time. I mean—"

"All right, everybody listen up!" Tim said. "I'm going to make my own decisions from now on. I'll go to school if and when—and wherever—I please!"

Karin glanced at him as if she'd forgotten he was there. "Well, of course, Timmy. But this is rather urgent, don't you see?"

Once again, he thought angrily, he came out second in importance to a robot.

The University of Luna offered financial aid in return for taking part in athletic research in low or zero-grav. Since this freed him from Karin's money, Tim enrolled. Karin didn't come to see him off when he boarded the shuttle. Couldn't wait to get down to the lab and her tests on PAPPI, he thought resentfully.

He worked through the university vacations as an assistant to a moon geologist who needed someone to keep track of his rocks. Since this wasn't so different from keeping a stamp collection, Tim rather enjoyed it.

Other guys had parents shuttle up to visit from time to time, well-dressed men and women who conversed knowledgeably about interactive theater and world politics and preserving traditional human values in a mechanized world. Just because humans had ventured out into space and depended on robot help, didn't mean they should abandon the historic virtues of the simple life—the family and physical labor—his new friends said. Tim knew what they meant. The kind of work his mother was doing at U.S. Robots was dangerous. "Mechanical Men," for goodness sake! Couldn't she see it wasn't wise to allow robots to become too clever? They were designed as servants, not partners in the human enterprise. If humans didn't keep that in mind, someday the robots would be a problem. Tim felt a growing estrangement from Karin and never invited her.

The most dazzling of these new friends was Sylvia Rathbone, daughter of an old-style entrepreneur in space, and as different in spirit from her father as he was from Karin. Sylvia represented everything he felt he'd been deprived of in life—money, a large family of aunts and uncles and cousins, a father who spoiled her shamelessly. She was a beautiful, merry, delicate-boned girl with movements as bright and swift as quicksilver. And to his great wonder and gratitude, she fell in love with him, too.

They were married in a small, intimate ceremony in the spring of '27, in a chapel carved from one of

the moon's vast underground caverns. They planned to keep it secret while he finished up the degree in geology he'd recently switched to, and she worked on her father to accept her marriage to a penniless student. But the following year, Beth was born. They sent notice of the event to both parents, and waited nervously.

Karin almost forgot to reply; she mentioned the birth finally in a postscript to her regular monthly fax transmission.

Mr. Rathbone's attorney notified them that Sylvia had been cut out of his will until such time as she divorced her unsuitable husband.

It was hard managing a family on a student's income, he found. But they went on. In the evening, he went home to his wife and his baby in the family area of the moon settlement. Sylvia had a small hydroponics garden where she grew tomatoes and corn to supplement their diet, and chrysanthemums for their spirits, she said. He was happy for the first time in his life, determined his daughter would have the proper family life that had been denied him. But he began to see that took money, and his happiness leaked away little by little.

He was off-world a year later, on a research trip with his geologist friend to bring in a little extra money, when a small piece of space debris hurtled in undetected and punctured the skin of the settlement in his sector. The atmosphere bled out swiftly. Automatic airlocks prevented the hemorrhage from spreading beyond the damaged area, but the robot rescue team was too late to save Sylvia. The baby had been in a creche in an unaffected sector.

The bill for the disposal of Sylvia's remains arrived just as he broke out of his stunned inaction and began to mourn. One of the settlement's robots brought it.

The wheel of his life had turned full circle. He, a child who'd been fatherless, raised by his mother, must play father to a motherless child. And he was broke. Swamp-black despair settled over him.

Two things happened.

Into this despair came Howard Rathbone III, who wanted his grandchild so urgently that he was prepared to make a deal with her father.

And Dr. Susan Calvin notified him by express fax that Karin had died suddenly after a brief illness and left him the little house in New York where he'd grown up. He'd never felt close to Karin, but it was difficult to comprehend that now she'd gone out of his life altogether.

He didn't want to accept Rathbone's suggestion, tempting though the money was. But he saw he'd have trouble keeping Beth from her grandfather otherwise.

There seemed to be only one thing to do. He fled with the baby, catching the first shuttle to Earth.

Tim sorted through the accumulated junk of his childhood. He found little of value in the house, little worth the exorbitant cost of lobbing it up to the colony. Karin had never been much of a homemaker. He packed a box of Scouting books he remembered treasuring as a boy, his old stamp collection in its dog-eared albums, the telescope PAPPI had helped him assemble.

He lugged the box of books out to the hall and set it down by the wall. Something on the polished wood floor drew his gaze, long blurred lines in the dust. He gently blew the dust aside. Scuff marks. He had a sudden jolting vision of PAPPI's wheels whooshing over the slippery floor, skidding to a stop by the front door as the robot retrieved the morning's mail. He saw, as if they were arriving now in Karin's hallway, the papers, the garish advertisements, the pleas for contributions to worthy causes (he remembered how angry Karin became each time she found a request for money from the antirobot people), all the second-class junk that the law didn't allow to clutter up the fax machines of the city's households. Sorting through this paper rubbish had been one of PAPPI's daily tasks. *Preventing me from having apoplexy!* Karin always said.

He crouched down and stared at the scuff marks. The floor appeared to have been resurfaced fairly recently. Gone were the scrapes and scratches Tim remembered inflicting on it over the years. Once her rambunctious son had left home, Karin had repaired the damage he'd done. But the scars left by the robot's wheels were still raw. They had occurred sometime after the floor had been resurfaced. Tim

straightened up slowly, disturbed by an idea growing in his mind.

He was uncomfortable here, anxious to be done with pawing over the artifacts of his boyhood. He turned to the visorphone to call one of the realtors whose cards he'd found pushed under the door. Time to cut loose from the past.

Before he could touch the keyboard, the phone shrilled at him. He hesitated. Rathbone again? Grimly he punched the receive button.

The face of a handsome, middle-aged man appeared on the screen.

"Tim Garroway?" The man had a pleasant, well-modulated voice. "I'm Stephen Byerley."

"Mayor—" Tim stumbled to a reply. "I—well, I'm delighted to meet you."

"My secretary gave me your message. I'd very much enjoy talking to you, but I'm afraid tomorrow's schedule is so tight."

Tim's heart leaped wildly. So it was going to be taken out of his hands after all. He was conscious of the strong feeling of relief that swept over him. "That's no problem, Mr. Mayor! No problem at all. It really wasn't important —that is, it can wait. "

Byerley smiled. "I believe we have friends in common, Tim. May I call you Tim?"

"Sure." He was impressed with the genuine warmth this man projected. How could he possibly have entertained ideas of eliminating him?

"I understand your mother was an associate of Dr. Susan Calvin, one of my most treasured friends."

Something dull and cold clutched Tim. Of course. It was to be expected. "Oh?" he said heavily. "Yeah, I suppose so. "

Byerley was a robot after all.

At the edge of his consciousness he was aware of Beth tugging at his sleeve. He put an arm around his little daughter, pulling her toward him. He was a fool if he thought he could avoid fate so easily. It crept up on him like some primeval beast slinking up to the little campfire he'd hoped would protect Beth and himself against the darkness.

"The calendar's crowded tomorrow," Byerley said. "But I make time to run in Central Park. Do you run, Tim? I heard you were something of an athlete. If you'd care to join me at six tomorrow morning—I hope that's not too early for you? I'm an early riser—we could talk then."

Early riser! Tim thought. I bet you don't sleep at all.

There really was no choice. It was Stephen Byerley's life—if you could call it that—against his. Byerley had signed his own death warrant.

"Sure thing, Mr. Mayor, "he said.

"Steve," Stephen Byerley said.

Tim nodded without replying and Byerley broke the connection. The weapon with which he must eliminate the robot bumped heavily against his hip as he turned away.

His stomach had twisted itself with tension, and he sensed the beginnings of a headache at the back of his skull. He would do what he had to do, for Beth 's sake. Until then, he'd put the whole thing out of his mind. He'd get on with packing up the house.

"What that, Dadda?" his daughter called, pointing at a door in the ceiling. She had a smudge of dust on one cheek, and toddled clumsily after him wherever he went.

"Nothing much, sweetheart. Just an attic for storage."

As he said it, something clicked into place in his mind. Of course. That was where it would be.

"Want see!" Beth announced imperiously.

Indulging his daughter's wishes took his mind off what he must do tomorrow. He touched the recessed button in the wall. The attic hatch opened, and wooden steps lowered to where they stood. He set one foot on the steps and the toddler immediately clung to his legs, clamoring loudly as if he were about to disappear forever. He picked her up and began his ascent. He made the climb awkwardly and

with effort, unused to Earth's gravity after all these years. Beth hummed encouragement to him as if he'd been a horse—or a robot, he realized.

It was cool and dim under the rafters, and it smelled of moldering clothes and musty books. Spiders had draped their gray curtains everywhere over the piled boxes and trunks. He moved cautiously, careful to keep the cobwebs away from Beth's face.

She saw it first, pointing with a chubby finger to a dark comer.

"Look, Dadda! Baby."

The robot sat like a blind deaf-mute under one of the main beams of the roof, only lightly powdered in dust. Even after all these years, it was impossible for him to look at it without emotion. Memories of baseball in the backyard, science projects, stamp collections, secret discussions about girls and sex, all came flooding back., His childhood was preserved in this attic, and all it took was one glance to bring it all back to vivid, painful life. He was eight years old again, and it was Father's Day.

What was it doing here? Karin took it back to the lab. It was a great achievement—the crowning glory of her scientific career

He had *assumed* she'd taken it back to the lab. The recent scuff marks in the hall said otherwise. But why had she put it up here—just before she died apparently?

"Me play!" his daughter announced imperiously, scrambling down from his arms.

Gray dust swirls spiraled around her and she sneezed. He leaned forward, steadying her as she maneuvered over the unfinished floor of the attic. She chuckled, her little body tense with the excitement of discovery. He felt swamped again by mingled emotions of love and helplessness. How could he be both father and mother to this little Columbus, so eager to explore each new world she encountered? How could he protect her from the ugliness of a world where robots became mayor—and men like Rathbone schemed to kill them?

The toddler's pudgy hands caressed the robot. The problem of the robot drew him again. The only reason he could imagine for Karin not returning PAPPI to the lab was because she'd cared about the robot.

He was about to pick Beth up and carry her away when the red light blinked on.

"Hello," said the weak but familiar voice, "I'm PAPPI, a Paternal Alternative. Would you like to play?"

His daughter looked as if she were going to cry.

He wasn't surprised to learn the robot's power supply was still operational. Tim crouched beside his little daughter and put his arms around her. Here in this attic, for the very first time in his life, he had the feeling that he understood Karin. She'd hidden the robot up here when she knew she was dying; she hadn't wanted PAPPI to go back to the lab, or to fall into the hands of the Fundies. What did that prove?

For a moment, he felt as if he were drowning under the tidal wave of the past. He was a small boy again, on Father's Day.

Maybe if she'd cared about the robot, she'd cared about Timmy, too.

Had he really been so deprived? Love was impossible to define, but surely it included sharing, partnership in work and play, nurturing. A family was just a group that cared about each other, even if it included a robot.

"Hello, PAPPI," Beth said uncertainly. "What are you?"

Could he give Beth as much as Karin had given him? He was certainly going to do his best. But what he wanted for his daughter couldn't be built on a foundation of hatred and violence. Good didn't come out of evil; PAPPI had taught him that. He couldn't keep that appointment with Stephen Byerley tomorrow morning.

And that would mean Rathbone would be after them. There'd be no returning to their home on the moon, and no staying here on Earth. Life was hard for a geologist prospecting out in the asteroids, but what other chance did they have to be a family—father, daughter, and robot?

"Sweetie," he said to his daughter, "this is your GrandPAPPI."