The Complete Robot

by Isaac Asimov
re told by Lewis Jones

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Robbie

"Ninety-eight, ninety-nine, one hundred." Gloria took her hands away from her eyes and turned round. She stood for a minute and looked all around her. Then she walked slowly away from the tree. Everything was quiet. There was only the faraway sound of a bird.

She half-closed her eyes against the midday sun, then she moved slowly across the grass towards the house. Too late, she heard the fast clump-clump of Robbie's metal feet behind her.

"Wait, Robbie!" she screamed. "You mustn't run before I find you."

Three metres away from the home tree, Robbie slowed down. Gloria ran past him and touched the tree first.

"I win! Robbie can't run!" she cried at the top of her eight-year-old voice.

His metal arms took her high up into the air, and Robbie turned round and round with her very fast. Then suddenly she was down on the grass again. She still held a metal finger.

She banged a hand against Robbie's body and said, "Bad boy!" Robbie held his hands over his face, so she laughed and said, "All right. I didn't mean it. But now I want a ride."

Robbie let the little girl climb on to his back. Then he ran across the field, and she laughed out loud. She loved the sound when her feet banged against his metal body. Suddenly he let her drop onto the soft green grass.
"Oh well. Are you ready? Right. Stay quiet and listen. One day. . ."

Before Gloria reached the end of her story, there was a cry from the house. "Gloria!" It was the voice of a woman who had called many times already.
"Mummy's calling me," said Gloria, not very happily. "Carry me back to the house, Robbie."
Mrs Weston saw them when Robbie's head came up above the long grass. "Where were you, Gloria?" she said.
"I was with Robbie. I forgot it was dinner time."
Mrs Weston turned to Robbie and said coldly, "It's your job to remember these things. Go away, Robbie. She doesn't want you now. And don't come back before I call you."
Gloria said, "Mummy, he can't go yet. I haven't finished the story for him."
"Gloria, if you don't stop this, you won't see Robbie for a week."
The robot left slowly. Was that really a sad look on his metal face?

George Weston sat in his soft armchair after a good dinner, and read the Sunday newspapers. So he was not pleased when his wife walked in.
"George, we must do something about that robot. He doesn't leave Gloria for a minute."
"Of course not. That's his job."
"George, Robbie has become a kind of second father to her."
"She loves him."
"Love? George, you're talking about a machine. Your daughter is spending her life with a machine. Do you want that? Maybe some day something will go wrong inside that robot, and—"
Weston put down his newspaper. "Robots can't hurt people. It's not possible. You know that."
"Most of the villagers think he's dangerous. They won't let their children come near our place in the evenings."
"Robots are a lot less dangerous than people. We're keeping him!"

But he loved his wife. Ten times during the next week, he cried, "Robbie stays!" But each time, he said it less strongly.
Then one day Weston took his daughter for a drive in his new car. When they got back, she jumped out and said, "I'm going to tell Robbie about the drive, Daddy." She ran across the grass. "Robbie—Robbie!"
She stopped suddenly when she saw a beautiful dog. It looked at her out of deep brown eyes. "Oh, what a lovely dog! Is it for me, Daddy?"
"Yes, it is, Gloria. And it likes little girls."
Gloria ran into the house and called, "Robbie—come and see. I've got a dog, Robbie."
Soon she came back, unhappy and afraid. "Mummy, Robbie isn't in his room. Where is he? Where's Robbie?"
Mrs Weston sat down and said softly, "Don't be sad, Gloria. Robbie has gone away, I think."
"Gone away? Where?"
"We don't know, dear. He just walked away. We've looked for him, but we can't find him. But you can play with your lovely new dog. He can play games and—"
"I don't want the nasty dog. I want Robbie." She began to cry.
"Gloria, don't cry. Robbie was just a nasty old machine. He wasn't alive, you know."

Gloria screamed, "He was a person, and he was my friend. I want him back."

Her mother left Gloria alone. "In a few days," she told her husband, "she'll forget the robot."

She was wrong. Gloria did stop crying, but she stopped smiling too. She became unfriendly and difficult.

Then one evening Mrs Weston stormed into the living room and said to her husband, "I've sent the dog back today. Gloria won't stay in the same room with him. I'm tired of all this."

Weston put down his newspapers. "Maybe we could get Robbie back. I could —"

"No! My child will not go through life with a robot. She must have a change."

"What kind of change?"

"A change of place. Let's get her away from this house. Let's go to New York."

"The city!"

"Why not? Gloria will meet new people there. She'll find new friends."

When they arrived in New York, Gloria began to smile again.

Mrs Weston said to her husband, "You see? She's better already. I knew that a change was the best thing."

Gloria said, "I know why we've come here, mummy."

"Why, dear?"

She laughed happily. "We're going to find Robbie, aren't we?"

Mr Weston's face became a strange colour, but he said nothing.

His wife said, "Just sit still and be quiet, Gloria."

They took Gloria to all the most famous places in New York. But in every new place, she only looked for robots. Every time a piece of metal moved, she turned her head fast and looked closely.

One evening, George Weston said to his wife, "I know what we can do about Gloria."

"You're not going to bring back that robot?"

"No. Of course not. But she still thinks Robbie is a person. So of course she can't forget him. We must show her that Robbie is only a machine. A thing of metal."

"How can we do that?"

"Easy. Last night, I telephoned Mr Struthers at US Robots. He says he'll show us around. His workmen make robots. They put them together from pieces of metal. Let Gloria see that — then she'll know that a robot isn't alive."

Mrs Weston's eyes opened wide, and a smile crossed her face. "George!" she said. "I think you've found the answer!"

Mr Struthers showed them a great many things, and he talked all the time.

Mrs Weston told him, "Please use easy words, then Gloria will understand everything."

In the last building, they went into a long room with a lot of bright lights. They walked around the sides of the room, a little above the floor.

"We make the robots here," Struthers told them with a big smile. And there are no people here. The workers are also robots —"

Gloria didn't really hear him. It all seemed strange and noisy to her. Then, she saw six or seven robots at a table halfway across the room. And one of them — could it really be true? One of them was like . . . yes, it was. Her eyes shone brightly.

"Robbie!" she screamed, and one of the robots suddenly dropped a piece of metal. Gloria jumped
down on to the floor below.

The three adults saw what the little girl did not see – a large heavy lorry that moved across the floor without a driver. Struthers called out to Gloria, but she only had eyes for Robbie. Weston jumped down on to the floor, but it was too late.

It was only Robbie who moved fast enough. He ran across the floor, and his metal arm took her high into the air. The lorry banged across the floor half a second after him. It drove on for another two or three metres, and then came to a slow, noisy stop. Mrs Weston's mouth opened and closed again.

She turned to her husband and said, "You wanted this, didn't you? You and Mr Struther – you both helped it to happen. Robbie doesn't do this kind of work. Your friend Mr Struthers placed him here, didn't he? You wanted to bring Gloria and that robot together."

"Well, all right. I did," said Weston. "But I didn't know about that lorry. And now Robbie has saved Gloria's life. You can't send him away again."

They turned and looked at Gloria. She still held on to the robot. Robbie's strong metal hands touched her hair softly, and his eyes shone a deep, deep red.

"Well," said Mrs Weston, "all right. He can stay with us – for ever."

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**True Love**

My name is Joe. My friend Milton Davidson calls me that. I am a computer program, and he is a programmer.

I can talk with other computers all over the world, and I know everything. Nearly everything! I am Milton's best program. He understands more about programs than any other person in the world. And because of his program, I can speak better than any other computer.

Milton is nearly 40 years old, but he has never married. One day, he said, "I'll find the right woman yet, Joe. And you're going to help me. You've found answers for many of the world's questions. Now you can answer a question for me. How can I find true love?"

I said, "What is true love?"

"Just find the right girl for me. You know about every person in the world."

I said, "I am ready."

He said, "I don't want women who are younger than 25, or older than 40. I don't want any woman shorter than 150 cm, or taller than 175 cm. And she must be a thinker."

He didn't want women with children.

"And no red hair," he said. "I don't like red hair."

After two weeks, I had 235 names.

"Right, Joe," he said. "Now get me their pictures. I want to look at them."

In the end, he called for eight of the women. He told me, "Change their jobs. And send these eight women here – one at a time of course."

Computers mustn't really move people from job to job. But I could do it now, because of Milton's program.

The first girl arrived one week later. Milton's face became very red when he saw her. He said, "Let me take you to dinner."

The next day, he said to me, "It was no good. She was a beautiful woman, but I didn't feel true love. Try the next one."
It was the same with all eight. He said, "I can't understand it, Joe. Those eight women were the best of them all. Why don't they please me?"
I said, "Do you please them?"
His mouth fell open, and he said, "That's it, Joe! I must be their true love too. But how can I know that?"
He thought about it all day. The next morning, he said, "Joe, I'm going to tell you everything about me – the story of my life. Then you can find a woman who could love me – one of the last 235."
For weeks, Milton talked to me. He told me about his mother and father, his brothers and sisters, his friends. His life as a child – everything.
"Joe," he said, "when you get more and more of me into you, you'll begin to think like me. And when you really understand me, you can find my true love for me."
I did begin to think like him. My voice became like his too.
I said to him one day, "You must have a woman who thinks like you, feels like you. And she mustn't be looking for one kind of face either. What are looks?"
"You're right," he said. "We think the same way already, Joe. Now find the right woman for me."
I found her. Her name was Charity Jones, and she worked at a bank in Chicago. She would be just right for Milton. I knew that, because now Milton and I thought and felt the same way. I changed her job, and Charity came to us.
The police came and took Milton away, but not because of his computer program. It was for something that happened ten years ago. I knew all about it of course, because he told me his full life story.
He's gone now, and tomorrow Charity will arrive, with her soft hands and her sweet voice. I will teach her to use me well. I know I am only a computer, but what are looks?
I will say to her, "I am Joe, and you are my true love."

The Complete Robot

Frank Quinn was one of the older men in the government, and a well-known businessman in the city. But every five years, the people voted for a new government. The time for voting was now only a few weeks away.
Times like these were dangerous for Frank Quinn. He had no wish to lose old friends, or make new enemies. That is why he now sat in the office of Dr Alfred Lanning, president of US Robots. Alfred Lanning sat at the other side of his desk, and his face was not friendly. Quinn's voice was soft, but strong.
"Dr Lanning, I think you know the name Stephen Byerley?"
"I have heard of the man."
"Perhaps you are hoping to vote for him when the times comes?"
"Perhaps." Lanning's voice was cold.
"I do not want Mr Byerley in the new government. He is no friend of mine. He doesn't think like me, and he and I want different things."
"Why are you telling me this?"
"Mr Byerley's job is the law. Three years ago he was unknown. Today he is one of the best-known lawyers in the city. I've had a look into his past." Quinn smiled. "That often helps, you know."
But I didn't find much. He once lived in a small village. There was a wife who died young. One day a car hit him, and he was badly hurt. Nearly died. He was ill for many months. Then he went to law school. Came to the city. Became a lawyer. A quiet life.

Quinn's voice became softer. "But today – ah! Things are very different now. Our lawyer friend never eats!"

Lanning's head came up fast, and the old eyes were wide. "What did you say?"
Quinn said slowly, "Our lawyer friend never eats. And he never drinks. Do you understand what I mean?"

Lanning sat back in his seat. "I understand. And the thing is not possible."
"Oh, it is more than possible. It is true. The man is a robot, Dr Lanning. And US Robots must have a close look at him."

"We cannot do that, Mr Quinn."
"You must. US Robots is the only maker of robots in the world. If Byerley is a robot, you made him."
"But we have never made a robot in the shape of a person. It is against the law."
"True. And if you do nothing, I will tell people that US Robots has broken the law. Then life will become very difficult for you. So why don't you look into some of these questions about Byerley, and then tell me the answers quietly?"

Stephen Byerley seemed to be a happy 40–year–old. He laughed out loud. At the other side of the desk, Lanning looked at him, and said nothing. A woman sat at Lanning's side.

"Really, Dr Lanning," said Byerley. "You think that I – I – am a robot?"
Lanning said, "Those are not my words, sir. But there is a person in the city –"
"Oh yes, I know, Frank Quinn – he doesn't want me in the new government. But go on. What can I do for you?"
"It's very easy. Just sit down to a meal in a restaurant. Let people see you eat. It would put an end to all these questions."

The woman beside Lanning still said nothing. Byerley turned to her. "You're Dr Susan Calvin of US Robots, aren't you?"
"Yes, Mr Byerley. My job is to know what robots will and won't do."
"Are they really very different from people?"
"Very. Robots are often better than people."
"And how can you tell if I'm a robot?"
She opened her handbag and took out an apple. Quietly she held it out to him. Stephen Byerley took it happily, bit into it, and ate it. Dr Lanning sat back and smiled.
Susan Calvin said, "Good. But it still doesn't show us that you're not a robot."
Byerley laughed again. "It doesn't?"
"Of course not. Either you are a real person – or you are a robot that seems to eat. We've learned only one thing – pieces of apple went inside you. Perhaps you're just a very good robot."

Dr Lanning said, "Maybe Mr Byerley is a robot and maybe he is not. But a meal in a restaurant would end all this. If people see you eat food on television, that will stop all their questions. Will you do it, Mr Byerley?"
Byerley said softly, "No. Sorry. Let Quinn tell the people his strange story. Then I'll show them that he's wrong. After that, they won't believe him any more. And perhaps they won't vote him into the government."
He stood up and left.

When Byerley came through the front door of his house, the man in the wheelchair looked up and smiled. The man's voice was small and strange. His face was out of shape, and there were old cuts across it. His mouth was down on one side. The mouth said, "You're late, Steve."
'I know, John. I know. I've been at US Robots. I think there's going to be a fight with Quinn.'

The unlovely face showed nothing, but some of the brightness left the eyes. "Quinn?"

"Yes. He's trying to lose votes for me. He wants to keep me out of the government. He says I'm a robot."

John's eyes opened wide. "It's not possible. I don't believe it."

"It's true."

Slowly, John's hands moved along the arms of the chair. "What are you going to do?"

"I think I can still win. But I shall want your help. Listen, and tell me what you think..."

A week before voting-day, the news went around the city: "Stephen Byerley is a robot." At the beginning, people laughed. But then they started to ask, "Can it be true?"

Outside Byerley's house, behind the line of policemen, people from the newspapers and television waited. Inside the house, a policeman held out a piece of paper.

"Mr Byerley," he said, "this lets me look through your house for robots in the shape of people."

Byerley smiled and said. "Of course. You must do your job."

The policeman's name was Harroway. He said, "We must also look at you — very closely. We have an X-ray machine."

Byerley's smile became wider. "So you want my X-ray picture. You want to know what's inside me? I'm sorry, but the police can't take X-ray pictures of people. It's against the law."

"But we can take X-ray pictures of robots."

"True. But I'm not a robot. I'm a person. Your piece of paper says that."

Harroway took it back and looked at it closely. "Where does it say that?" he asked.

"It says you can look through the house that belongs to Stephen Byerley. A house can't belong to a robot, Mr Harroway. Nothing can belong to a robot. So I'm a person. And if you take an X-ray picture of me, you'll break the law. And you don't want to do that, do you?"

Harroway stood still for a minute, then he turned and walked out without another word. To the people from the newspapers and television he called out, "I'll have something for you tomorrow, boys!"

In his car, he sat back and took something from his pocket. It was a very small X-ray machine. Now he had an X-ray picture of the inside of Stephen Byerley. He hoped the picture was a good one.

That night, Quinn called Byerley on the phone. "Byerley," he said in a loud voice, "you're wearing something inside your clothes that stops X-rays! Tomorrow I'm going to tell the people that."

Byerley was friendly. "Oh dear! So our friend Harroway's little X-ray picture was no good."

"People will know that you're afraid of X-ray pictures."

"They will know that you and your friends break the law. And they will vote for me."

"Another thing was not in your home today, Byerley. A person in a wheelchair."

"You're right," Byerley said. "My old teacher — a scientist who lives with me. He's now taking a holiday in the country."

"Your teacher!" Quinn said. "I'll tell you who he is. Your 'teacher' is the real Stephen Byerley. You are his robot. He built you. All those years ago, that car hit him, not you. I can send men out to his country place, you know. They'll soon find out who he really is."

"Oh dear, Quinn. You really don't know much about the law, do you? You can't just walk into other people's homes. Didn't you know that? The law won't let you."

Quinn said, "Byerley, people are starting to believe you're a robot. So they won't vote for you."

"If that's true, you've won. So why are you phoning me?"

After a few seconds, Quinn said, "Goodbye!" The phone went dead.
On the day before voting-day, thousands of people came together in the market place, and Stephen Byerley was ready to speak to them.

His friends told him, "Don't do it. It's dangerous. Some of those people are your enemies. Quinn has sent them. They don't want to listen to you. They could stone you."

But Byerley smiled and walked towards the thousands of faces. From the start, his talk didn't please them. There were cries, and a lot of noise. Byerley spoke on slowly. Suddenly, a man at the front jumped forward. He was a thin man with clothes that were too short for him. A policeman ran towards the man, but Byerley called out, "Let him come forward."

There was now too much noise, and Byerley called to the man, "What do you say? If you have a question, I'll answer it. Come up here."

The cries became quieter. The thin man jumped up beside Byerley. The man's face was red and unfriendly. He cried out, "Hit me, Byerley. You say you're not a robot. Show me. You can't hit real people, can you?"

The man had a nasty laugh. "You can't hit me," he screamed. "You won't hit me. You're not a real person. You're not a man. You're a dirty machine."

Stephen Byerley's mouth became a thin line. He brought his arm back, then hit the man very hard, full in the mouth. The man went over on to his back, and there was a strange look on his face.

Byerley said, "I'm sorry. Take him inside and find him a chair. I want to speak to him later."

Dr Calvin turned her car and drove off. A newspaperman called out a question after her. "He's not a robot," she said.

Dr Calvin and Stephen Byerley met once again, the night before he went into the government.

She said, "Quinn is finished. You did that. But he was not all wrong. He believed that a car hit the real Stephen Byerley — the scientist. And it killed his wife at the same time. Byerley's face and his voice were never the same again, and he couldn't walk. Now he only had his hands.

"He built a robot, and he sent it out into the world with the name Stephen Byerley. And the real Byerley — the 'old teacher' — stayed at home. But then you hit a man. So you must be a person. And now you're going into the government."

Byerley looked at Susan Calvin and said, "Why are you smiling, Dr Calvin?"

"I'm smiling because Mr Quinn didn't think of everything."

"What do you mean?"

"Stephen Byerley did something once, so he could do it a second time."

"I don't understand."

Dr Calvin got up and began to leave. "There is only one time when a robot can hit a person."

"And when is that?"

"When that 'person' is another robot."

At the door, she smiled. "Goodbye, Mr Byerley. Some robots are better than some people. I hope to vote for you again next time."

And Stephen Byerley laughed softly when she closed the door behind her.
Mrs Avis Lardner a killer? That couldn't be true, could it? She was a lovely person – the kindest and sweetest of women. Many years ago, her husband died, out in space, and the government gave her a lot of money. Now, in late middle age, she was very rich.

Her house was a showplace, and in it were many expensive and beautiful things from all over the world. A golden knife from Cambodia, a sword from Japan, an old German music box, an Egyptian water-clock... Treasures from many different countries.

Her house was always open, but her treasures were in no danger from thieves. Mrs Lardner kept a number of robots. They were always in the house, and they kept a close eye on all her treasures.

And then of course there were the famous Adventures in Light. When she had a party, she always put on a light-show.

Lights of a thousand colours danced through her rooms. Blood−red rivers crossed the walls, and changed to pictures of apple−green fields in spring. Waterfalls fell from milk−white clouds, and ran on to the dark sea. Stars shone brightly in the cold blackness of a winter's night, and the sun came up and brought with it the warm gold of a summer morning. Then suddenly the blue skies were on fire, and became orange snowstorms and pretty yellow rain.

People came to Mrs Lardner's parties from far away, just to see her beautiful light−shows. Her Adventures in Light were never the same twice. Many other people tried to put on light−shows, but after Mrs Lardner's Adventures in Light, they were nothing.

She put on these shows only at her parties, and never sold them. "That would be business," she once said, "and it is only for my friends."

She was always kind and friendly when she talked to her robots. "Please, Courtney," she said, "would you be kind enough to bring more drinks?"

Once, a man from the government's Office of Robots told her, "You can't do that. Just tell them what to do. Robots are not people. They're machines. When you speak to them like that, it's more difficult for them. They don't always understand what you mean. They move more slowly."

Mrs Lardner said, "I do not ask for fast robots. I ask for friendliness. My robots love me."

The government man didn't tell her that robots cannot love. His words could hurt this lovely woman, and he didn't want that.

Sometimes a robot did things wrongly. But she never sent them back to US Robots for a change. "When a robot is working in my house," she said, "he is my friend. I know they sometimes get things wrong, but that's all right. People sometimes get things wrong too, but we don't send them away and change them, do we?"

The robot Max found it difficult to understand his work, but she kept Max too. "He can still take visitors' hats and coats," she said. "He does that very well. And he can hold things for me."

To the warm−hearted Mrs Lardner, all robots were sweet. She was that kind of woman. How could she possibly kill?

Kill John Travis? Who could possibly do that? He too was quiet and soft−spoken, and he lived in a world of numbers. He could carry hundreds of numbers in his head, and he worked for US Robots.

He also loved light−shows, and once wrote a book about them. He often tried to find out how the light−machines could make all those beautiful pictures. He thought numbers could give him the answer. But they never did.

He tried to make light−shows too, but they were poor and unreal. He was very unhappy about this. He knew about Mrs Lardner's Adventures in Light, of course. He wrote to her many times, but he learned nothing from her letters.

Then one day she asked him to come to one of her parties. When Travis met Mrs Lardner, he said, "I don't understand."

"What don't you understand, Mr Travis?" "These robots of yours – they're not modern ones.
They're all the old kind. Very strange."
"What's strange about that?"
"Well – that robot that took my hat and coat at the door – "
"That is Max," said Mrs Lardner.
"He's a very old kind. He was slow, and he moved badly. Why haven't you sent him back to US Robots? We could change him for you. He'd be a lot better at his job."
"Oh no," she said. "Max is all right. He works well enough for me. And I don't want to lose him. Changes like that take too much time."
"No, no, Mrs Lardner. I work for US Robots. And when I came in tonight, I made some small changes to your robot. It was very easy. He works much better now. You'll see."
For the first time in her life, a dark look of danger crossed Mrs Lardner's face.
"Change?" she said. "Changed him? But he is the one who made all my Adventures in Light. It was only the old kind of robot that could think like that. And now – "
She still held in her hands the golden knife from Cambodia. Travis's mouth fell open, and he was suddenly afraid.
"You mean . . . that old robot could – And now I've changed him. And he'll never again – "
She ran forward very fast with the knife. And he didn't try to move to one side.
Some people said, "He came forward to meet it. I think he wanted to die."

Pictures in my head

For the first time ever, US Robots lost a robot. It was in an air car that dropped out of the sky, hit the ground, and broke into thousands of pieces.
The government wanted to know: Why did the air car fall? What really happened? A number of scientists looked at the pieces, asked a lot of questions, and came up with the answer.
Something hit the air car – a large piece of stone from space. These stones come towards the earth very fast, and the air car had no time to fly to one side. So it broke up.
But that was not the worst of it. The really bad news was – a robot inside it also broke up, and most of the pieces were lost. Worse still, JN5 was the very newest kind of robot – it was different from any other robot in the world. And, perhaps worst of all, Madarian was also in the air car, and died.
Madarian was US Robots' best scientist. It was ten years since he came to US Robots. For five of those years, he worked under the cold eye of Susan Calvin. Madarian found the answers to many of the most difficult questions about robots. He made robots that were better and better, and soon his name was well-known all over the world.
Susan Calvin moved him to higher and higher jobs in US Robots. He was very different from the famous Dr Calvin in many ways. Madarian had a wide, strong body, a head of red-brown hair, a heavy voice, and a loud laugh. He enjoyed life to the full. After people met him, they didn't easily forget him.
But Susan was a quiet person who spoke softly and said little. When she became too old for the job, and left US Robots, Madarian took her place.
After only one day in his new office, he said to Peter Bogert, one of his scientists, "Peter, I'm going to do something that's really different. I'm going to build robots that think freely."
Bogert suddenly seemed old and tired. His hair was white now, and soon he would follow Susan and leave US Robots. "Free?" he said. "You mean, free of the three Robot Laws?"
"No, no, Peter. Not that. All robots must follow the three laws. But let's talk about a robot's thoughts."

"Thoughts!"

"You know what I mean. They think well enough when they do their jobs. But every robot can only do one kind of work."

"They work better that way. One robot: one job."

Madarian sat forward in his chair. "Forget about robots for a minute, Peter. Think of people. Where do all their thoughts come from — the really new thoughts? People like you and me, Peter — we get new thoughts every day. But where does a new thought come from? You don't know, I don't know. A thought just hits you. It jumps into your head. When you get a right answer, it just feels right. You and I can smell a right answer, Peter."

"So?"

"I'll tell you one thing, Peter. You'll never get a new thought if you think like a robot. Never. Why? Because you only get a new thought when you put together two old ones — in a new way. Robots can't do that. That's why we're different from robots. We can think freely."

Bogert put his head in his hands for a minute.

Madarian laughed out loud. "You see? I know what you're doing — you're making pictures in your head. Have you ever seen a robot do that? Have you ever seen a robot sit back and think? No! You see what I mean?"

"But could you make a robot that thinks like that?"

"That's what I believe," said Madarian.

They went on for a long time like that.

The scientists at US Robots didn't much like Madarian's talk.

One of them said, "A robot like that could suddenly start doing new things. I don't think people will like that. They'll be afraid. They'll think the new robots are dangerous."

"All right. Don't tell people that the robots can think in new ways. Just tell them that these are robots with feeling."

"People don't want a robot that's like a man."

Madarian said, "OK. Tell them the new robot is not like a man. Tell them..."

"Tell them it's like a woman?"

The others laughed. Madarian was quiet, and then suddenly he laughed too. "That's it," he said. "Why not? The first one would be JN−1. People always give robots names. You know that."

"Like John−1?"

"Yes. But why not Jane−1?"

"All right. But what kind of work are these robots going to do?"

"Not jobs around the house, or things like that. But they can find answers for us."

"What kind of answers?"

Madarian sat back in his chair. "I've thought about that. How about this — In our part of space, which stars have worlds with life? We know many thousands of stars that could have worlds around them. But which are the best ones to visit? We don't know."

One of the scientists said, "How would this Jane robot help us?"

"Only a few stars have names. Most stars just have a number. Among those millions of numbers, the answer is waiting for us. We've looked for that answer for years, but we've never found it. We don't want more numbers — we want new ways of thinking. A JN robot could run through all those numbers faster than you or I could. But it could also think about them in new ways."

They went on for a long time like that.

The costs would be very heavy. But in the end, the scientists said yes — Madarian could have his money.
Madarian built Jane−1. The robot not only had a woman's name. It also had something of a woman's shape. The other scientists didn't like that much. Jane−2 was good, but still not good enough. Jane−3 and Jane−4 were nearly right, but their thinking was a little too slow.

Madarian was happy and full of life, and his laugh became louder. He was like a child with a new plaything. He hoped for great things. He often ran into Bogert's bedroom at three o'clock in the morning, to bring him the latest news.

Jane−5 was just right. Jane−5 was shorter and thinner than the other robots. The scientists all called the robot she, and they talked to her in a friendly way.

One of them told Bogert, "She doesn't have the shape of a woman, but she's like a woman in some ways. I don't really know what it is. But something is woman−like about her."

Madarian put his hands in his pockets and said, "I'd like to take Jane to the California Science Centre."

Bogert said, "Why?"

"Because it's the world centre for work on the stars. For most of the time, they're looking for life in space. New worlds."

"Madarian, we can't just send a robot across the country. It's against the law. You know that. Robots can't go in cars or planes. They can't move about freely like that. The government still thinks they're too dangerous."

Madarian said, "Don't tell people! Don't tell the government! Just put Jane on to a US Robots air car. We can put her in a box, and she can go by ground car to the plane. Who will know? Just do it, Peter."

Bogert got his phone call just one hour after Madarian arrived at the California Science Centre. Madarian talked fast and happily. "Jane is great, Peter. Just great!"

"You mean you've got the answer?"

"No, no. Give us time. I mean her voice. At the beginning, the scientists here just stood with their mouths open. Then she said, Good afternoon, gentlemen. I'm pleased to meet you. And it came out in that beautiful womanly voice."

"You mean they're talking to her?"

"Of course they are."

"Where is she now?"

"She's with them. They won't let her go."

"Get in there with her! Don't leave her alone for a minute, man!"

During Madarian's ten days at the Science Centre, he telephoned less and less often, and he became quieter. The scientists liked Jane, and talked to her all the time. But there were no answers. Before the last phone call, Bogert had very little hope.

And the call came at the very end. Madarian's voice was very small and quiet, and Bogert couldn't hear him very well.

"Madarian," he said, "what's wrong? Have you lost your voice?"

The small, tired voice said, "She did it. I'm in the air car now, on the way back."

Bogert said. "You have the answer?"

"She has the answer. She's given me three star−numbers. Three stars with worlds that must have life."
"Can I really believe you?"
"Of course you can. I'm not the only one who heard her. When she began to give the answer in that beautiful voice, the poor man jumped right up in the air − "
That was when the air car suddenly broke into pieces.

The scientists at US Robots had heavy hearts. One of them, Scott Robertson, told Bogert, "There's only one good thing about it. People never knew that we sent a robot across the country. And the government doesn't know we broke the law."
Peter said, "It's bad. One of our robots found the answer to life on other worlds, and now people will never know."
Robertson said, "We could build other Janes, couldn't we?"
"Oh yes. But you're forgetting something. Jane found the smallest pieces of news − she heard something here, she saw something there. She just happened to be in the right places with the right people at the right times. She put all the pieces together in new ways. We could try for a hundred years and never meet those same pieces of news again."
"In the last phone call, Madarian said another man heard Jane's answer. Remember?"
Bogert said, "I know. Don't you think I've phoned the Science Centre about it? Not one scientist there remembers anything about it. They all say they didn't hear Jane's answer."
Bogert sat back full of sadness and without hope.
Robertson said, "Peter − let's ask Susan."
"What!"
"Let's call her and ask her to come in."
"She's nearly eighty."
"And you're seventy. What about it?"
"Well − she was always better at answers than any of us."

Susan Calvin came into Bogert's office and looked around slowly. She was older now. Her hair was snow-white, but she still had the same bright eyes.
Bogert came forward and held out his hand. "Susan!"
She took it and said, "Hello, Peter. You have a strong hand for an old man."
"Susan," he said, "I've called you in − " He stopped, and didn't know how to go on.
She sat down slowly and said, "Peter, you've called me in because you have questions with no answers. Don't spend time on homely conversation. Begin at the beginning."
She sat and said nothing while he told her the sad story.

"Pictures in the head? You wanted a robot for that? And what's all this about a womanly voice? You men! Shall I laugh at you or just walk away?"
"Please, Susan − "
"All right. I must see all the papers about the new robot. I want to know about the phone calls from Madarian, your calls to the Science Centre − everything. Can I use this office for an hour or two?"
"Yes, of course."
"Right. Get out of here, Peter."
After 45 minutes, she called for Bogert. Her face was hard, and his hopes began to die.
"Can you do nothing for us, Susan?"
She said, "I've thought a little, mostly about Madarian. He was a loud man, wasn't he? Talked fast, thought fast. Always on the move."
"Yes, he was."
"He always ran to you at once when he had any news."
"Oh yes, at any time of the day or night."
But that last call came from the air car. Why did he wait? Why didn't he call you at once from the Science Centre, when Jane spoke?"
"Well, I don't know. Perhaps he didn't believe her. Maybe he wanted to question her about --"
"He was not that kind of man, Peter. And there's something else. In that last call, Madarian said "I'm not the only one who heard her. When she began to give the answer in that beautiful voice, the poor man jumped right up in the air. Now why did the man jump?"
Bogert said, "I don't really know. Happiness perhaps? The sudden answer after all that waiting? Perhaps she spoke in a very loud voice."
"Why? I thought she had a soft 'womanly' voice? And there's another thing. The man jumped when she began to speak. Why? Perhaps a listener would jump at the end of her answer. But why at the first sound of her voice?"
Bogert said uneasily, "I don't think you can ask about every little word --"
"Oh, but I can," Susan said in a dry voice. "And I do."
"You have a number of questions," Bogert said. "But do you have any answers?"
"Of course I have. I've read through all the papers. In California, Madarian went from the air car to the Science Centre in a ground car, with Jane in a box. Did they go in the same way from the Science Centre back to the air car?"
"Yes. A ground car always took them to and from the air car. With Jane in a box."
"Took them, you say. But the ground car didn't really take them, did it? It was a man who took them. In other words, there was one other person -- the driver."
"Oh dear! I didn't think of that!"
"Peter, you think the only people in the world are scientists. You just don't see the others. You don't think about them. I know you questioned many scientists in California. Did you question any other people? Any car drivers perhaps?"
Peter said nothing, and a grey look came over his face.
"Of course not," she went on. "To you, a car driver is just part of the car."
"But can this really be true?"
"Of course it can. Jane was in the box, wasn't she? And on the way to the air car, the answer suddenly came to her. Of course she began to talk at once. The driver didn't know what was in the box. And suddenly a beautiful womanly voice sounded from inside it. Of course the man jumped. Maybe he screamed too!"
"But why hasn't the driver come forward and told us?"
"Why would he do that? He didn't know anything about stars and numbers and worlds with life. He just drives cars. Perhaps Madarian said, 'It's all right. It's not really a woman in there. It's only a robot.'"
"But it's against the law to take robots across the country."
"That's right. So perhaps Madarian also gave the man some money, and said Just keep your mouth shut and forget about this."
"Will the man remember what Jane said?"
"Why not? Perhaps you don't know it, Peter, but car drivers can think too. Maybe he'll get some of the letters and numbers wrong. But he'll also get some of them right. If he remembers enough of them, it will be a lot easier for us to find those stars."
Bogert looked hard at her. Then he said in a small voice, "But Susan -- how can you really know that this is true?"
For a minute, she thought of the real answer: because I've called the Science Centre. And because I've spoken to the driver. And because he told me what he heard. And because the Science Centre has already found the three star−numbers. And because I have those numbers in my pocket.

But she didn't say any of it out loud. Why not let Peter do the work? It was his job.

Slowly she got to her feet, and said quietly in her most womanly voice, "How can I know? I just followed the pretty pictures, Peter. The pictures in my head."

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THE COMPLETE ROBOT is the definitive anthology of Asimov's stunning visions of a robotic future. In these stories, Isaac Asimov creates the Three Laws of Robotics and ushers in the Robot Age: when Earth is ruled by master-machines and when robots are more human than mankind.

Contents: The Complete Robot is a collection of science fiction short stories by Isaac Asimov written between 1940 and 1976, which were previously collected in books "I, Robot", "The Rest of the Robots", and other anthologies. Although working well enough as standalone stories, they share a theme of the interaction of humans, robots and morality, and put together tell a larger story of Asimov's fictional history of robotics. Contents: * "A Boy's Best Friend" * "Sally" * "Someday" * "Point of View" * "Think!" *