

S1
Sequence 2
CAN SCIENCE FICTION HELP US PREDICT THE FUTURE ?

ANTICIPATION :

What science fiction writers do you know ?

What science fiction movies were adapted from books ?

Which innovations you can find in them might become the reality in the future ?

IV SOME USEFUL VOCABULARY

Science, the sciences	la science, les sciences
Scientific progress	les progrès scientifiques
Medical/technological advances	les progrès médicaux/technologiques
A scientist	un scientifique, un savant
The scientific community	la communauté scientifique
Scientifically proven	prouvé scientifiquement
Physics	la physique
A physicist	un physicien
Chemistry	la chimie
A chemist	un chimiste
An astronomer	un astronome
Computer science	l'informatique
A computer scientist, a computer engineer, an IT specialist	un informaticien
Knowledge	la connaissance, les connaissances, le savoir
A theory	une théorie
Theoretical	théorique
A hypothesis	un hypothèse
Data	des données
To call a belief into question	remettre en cause une croyance
Research	la recherche, des recherches
To do research	faire de la recherche
To carry out research into/on a subject	faire des recherches sur un sujet
CuttingJedge research	la recherche de pointe
Groundbreaking research	des recherches révolutionnaires
A researcher, a research worker	un chercheur
Technique	technique
Technology	technologie
Technical	technique
A technician	un technicien
A science park	une technopole
The technorati	les gens qui ont une compétence technique
A technophobe	un technophobe
Technophobic	technophobe
Technophobia, technofear	la technophobie

Technocracy	la technocratie
To improve	améliorer
A patent	un brevet
To innovate	innover
An innovation	une innovation
Inventiveness, creativity	inventivité, créativité
To pioneer the study of something	être l'un des premiers à étudier qch

IIW A TED TALK ON THE TOPIC

<http://ed.ted.com/lessons/how-science-fiction-can-help-predict-the-future-roey-tzezana#review>

- 1) Listen to the talk once without the subtitles and take notes.
- 2) Read the following multiple choice questions and answer them after listening to the talk a second time.

Choose the right answer for each proposition :

- 1" Who wants to know what's in the future :
 - a. Only governments
 - b. Only militaries
 - c. Everyone
 - d. Industry leaders
- 2" What are the people who attend to forecast the future called ?
 - a. Futurologists
 - b. Futurists
 - c. Predicters
 - d. Magicians
- 3" In the 20th century, a think tank was made of people who were able to forecast several technologies we take for granted today. Which is NOT mentioned ?
 - a. Artificial organs
 - b. Libraries able to look up for research material for the reader
 - c. The use of birth control pills
 - d. X rays
- 4" The futurists arrive at their predictions by analysing :
 - a. Movements and trends in the society
 - b. The climate change
 - c. The evolution of population rates
 - d. Nature
- 5" A 19th century scientist would think Uranium 235 is magic because his knowledge includes :
 - a. No knowledge of radioactivity or nuclear physics
 - b. No knowledge of electricity
 - c. No knowledge of quantum physics
 - d. No knowledge of medicine
- 6" The stakes for future generations to be able to imagine the unimaginable are higher than ever before :
 - a. Because technological progress is way too advanced
 - b. Because technological progress has brought with amazing complexity and challenges
 - c. Because technological progress changes too quickly
 - d. Because technological progress will stop one day
- 7" Science fiction in literature emerged in the :
 - a. 18th century

- b. 19th century
- c. 20th century
- 8" In *BRAVE NEW WORLD*, Aldous Huxley foretold about :
 - a. X rays
 - b. The use of antidepressants
 - c. The nuclear bomb
- 9" In 1853, Ray Bradbury's *FAHREINHEIT 451* forecast earbuds called in the book :
 - a. Earing bubbles
 - b. Thimble radios
 - c. Wired ears
- 10" In 1968, in 2001 *SPACE ODYSSEY*, Arthur C. Clarke described :
 - a. The PC
 - b. A portable, flat screen news pad
 - c. A wireless phone
- 11" Michel Foucault said :
 - a. My job is making windows where there were once walls.
 - b. My job is making mirrors where there were once walls
 - c. My job is opening doors.
- 12" The project called *iKnow* proposed scenarios for the future. Which is not one of them ?
 - a. The discovery of an alien civilisation
 - b. Radical life extension
 - c. A better communication between people.

III ISAAC ASIMOV

1) A FEW ELEMENTS ABOUT ISAAC ASIMOV

Try to fill in the blanks.

Voracious - immigrated – *Second Foundation* - contribution – accepted – Born in – joined – full-time writing – science fiction – *I, Robot* – recognition – Robotics - – conflict – own existence – sci-fi – became an – short stories – settled – harm – received - chemistry

..... 1920 in Petrovichi, Russia, of Jewish parents, Isaac Asimov..... to New York with his family in 1923. They in Brooklyn, where his father opened a candy store. Young Isaac was a and a brilliant student: he was at Columbia University at 15 and got his Bachelor of Science degree at 19. He in the US Navy in 1942 and served as a chemist until 1945, when he was able to continue his doctoral studies in..... He received his PhD in 1948 and soon after started working at the Boston University School of Medicine, where he associated professor in 1951. In 1958 he turned to

Asimov is considered the most prolific writer of since the publication of his first story « Marooned off Vesta » in 1939 in *Amazing Stories* (a well-known sci-fi magazine), he has written over four hundred books and

Among his most famous works are (1950), *The Stars Like Dust* (1951), *The Naked Sun* (1957) and a trilogy, *Foundation*, *Foundation and Empire* and (1951-53). His short stories have been collected and published as *The Complete Robot* (1982). He also wrote an impressive amount of non-fiction works including a four-volume History of North America and two-volume guide to the Bible.

Isaac Asimov is also well-known for the 3 laws of: These (often shortened to The Three Laws or Three Laws) are a set of that were introduced in his 1942 short story "[Runaround](#)", although they were in a few earlier stories. The Three Laws are:

- 1) A robot may not a human being or, through inaction, allow a human being to come to harm.
- 2) A robot must obey the orders given to it by human beings, except where such orders would the First Law.

3) A robot must protect its as long as such protection does not conflict with the First or Second Laws.

These form an organizing principle and unifying theme for Asimov's **robotic**-based fiction, appearing in his **Robot** series, the stories linked to it, and his **Lucky Starr series** of **young-adult fiction**.

During his life time, Isaac Asimov several prizes. In 1982, he won a special Hugo Award for his as the Best All-Time Science Fiction series and in 1987 he was designated a Grand Master of by the Science Fiction writers of America, who presented him with a special Nebula Award.

He died in New York in 1992.

2) A SHORT STORY by ISSAC ASIMOV

A/ Anticipation

Here are key words that you will find in the short story. Look at them, then think of the plot of a story containing all those keywords.

JOEJ MILTON – NEVER MARRIED - PROGRAM – PROGRAMER- TRUE LOVE - IDEAL GIRL
– HELP - COMPUTER – DATABANKS – GOOD MATCHES – LOOKS - PERSONALITY

B/ The short –story – WRITTEN COMPREHENSION

1

My name is Joe. That is what my colleague, Milton Davidson, calls me. He is a programmer and I am a computer program. I am part of the Multivac]complex and am connected with other parts all over the world. I know everything. Almost everything. I am Milton's private program. His Joe. He understands more about programming than anyone in the world, and I am his experimental model. He has made me speak better than any other computer can.

« It is just a matter of matching sounds to symbols, Joe », he told me. « That's the way it works in the human brain even though we still don't know what symbols there are in the brain. I know the symbols in yours, and I can match them to words, one]to]one. » So I talk. I don't think I talk as well as I think, but Milton says I talk very well. Milton has never married, though he is nearly forty years old. He has never found the right woman, he told me. One day, he said, « I'll find her yet Joe. I'm going to find the best. I'm going to have true love and you're going to help me. I'm tired of improving you in order to solve the problems of the world. Solve *my* problem. Find me true love. »

I said, « What is true love ? »

« Never mind. That is abstract. Just find me the ideal girl. You are connected to the Multivac]complex so you can reach the data banks of every human being in the world. We'll eliminate them all by groups and classes until we're left with only one person. The perfect person. She will be for me. »

I said, « I am ready. »

2

He said, « Eliminate all men first. »

It was easy. His words activated symbols in my molecular valves. I could reach out to make contact with the accumulated data on every human being in the world. At

these words, I withdrew from 3, 784, 982, 874 men. I kept contact with 3, 786, 112, 090 women.

He said, « Eliminate all younger than twenty]five ; all older than forty. Then eliminate all with an IQ under 120 ; all with a height under 150 centimeters and over 175 centimeters. »

He gave me exact measurements : he eliminated women with living children : he eliminated women with various genetic characteristics. « I'm not sure about eye color, » he said, « Let that go for a while. But no red hair. I don't like red hair. »

After two weeks, we were down to 235 women. They all spoke English very well. Milton said he didn't want a language problem. Even computer]translation would get in the way at intimate moments.

« I can't interview 235 women, » he said. « It would take too much time, and people would discover what I am doing. »

« It would make trouble, » I said. Milton had arranged me to do things I wasn't designed to do. No one knew about that.

« It's none of their business », he said, and the skin on his face grew red. « I tell you what, Joe, I will bring in holographs, and you check the list for similarities. »

He brought holographs of women. « These are three beauty contest winners », he said. » Do any of the 235 women match ? »

Eight were very good matches and Milton said, « Good, you have their data banks. Study requirements and needs in the job market and arrange to have them assigned here. One at a time of course. » He thought a while, moved his shoulders up and down, and said, « Alphabetical order. »

3

That is one of the things I am not designed to do. Shifting people from job to job for personal reasons is called manipulation. I could do it now because Milton had arranged it. I wasn't supposed to do it for anyone but him, though.

The first girl arrived a week later. Milton's face turned red when he saw her. He spoke as though it were hard to do so. They were together a great deal and he paid no attention to me. One time, he said, « Let me take you to dinner. »

The next day he said to me, « It was no good, somehow. There was something missing. She is a beautiful woman, but I did not feel any touch of true love. Try the next one. »

It was the same with all eight. They were much alike. They smiled a great deal and had pleasant voices, but Milton always found it wasn't right. He said. « I can't understand it, Joe. You and I have picked out the eight women who, in all the world, look the best to me. They are ideal. Why don't they please me ? »

I said, « Do you please them ? »

His eyebrows moved and he pushed one fist hard against his other hand. That's it Joe. It's a two]way street. If I am not their ideal, they can't act in such a way as to be my ideal. I must be their true love, too, but how do I do that ? » He seemed to be thinking all that day.

Imagine what follows.....

The next morning he came to me and said. « I'm going to leave it to you, Joe. All up to you. You have my data bank, and I am going to tell you everything I know about myself. You fill up my data bank in every possible detail but keep all additions to yourself. »

« What will I do with the data bank, then, Milton ? »

« Then you will match it to the 235 women. No, 227. Leave out the eight you've seen. Arrange to have each undergo a psychiatric examination. Fill up their data banks and compare them with mine. Find correlations. » (Arranging psychiatric examinations is another thing that is against my original instructions.)

For weeks, Milton talked to me. He told me of his parents and his siblings. He told me of his childhood and his schooling and his adolescence. He told me of the young women he had admired from a distance. His data bank grew and he adjusted me to broaden and deepen my symboltaking.

He said. « You see, Joe, as you get more and more of me in you, I adjust you to match me better and better. You get to think more like me, so you understand me better. If you understand me well enough, then any woman, whose data bank is something you understand as well, would be my true love. » He kept talking to me and I came to understand him better and better.

I could make longer sentences and my expressions grew more complicated. My speech began to sound a good deal like his in vocabulary, word order and style.

I said to him one time, « You see, Milton, it isn't a matter of fitting a girl to a physical ideal only. You need a girl who is a personal, emotional, temperamental fit to you. If that happens, looks are secondary. If we can't find the fit in these 227, we'll look elsewhere. We will find someone who won't care how you look either, or how anyone would look, if only there is the personality fit. What are looks ? »

« Absolutely, » he said. « I would have known this if I had had more to do with women in my life. Of course, thinking about it makes it all plain now. »

We always agreed ; we thought so like each other.

« We shouldn't have any trouble, now, Milton, if you'll let me ask you questions. I can see where, in your data bank, there are blank spots and unevennesses. »

What followed, Milton said, was the equivalent of a careful psychoanalysis. Of course, I was learning from the psychiatric examinations of the 227 women – on all of which I was keeping close tabs. »

Milton seemed quite happy. He said, « Talking to you, Joe, is almost like talking to another self. Our personalities have come to match perfectly. »

« So will the personality of the woman we choose. »

5

For I had found her and she was one of the 227 after all. Her name was Charity Jones and she was an Evaluator at the Library of History in Wichita. Her extended data bank fit ours perfectly. All the other women had fallen into discard in one respect or another as the data bank grew fuller, but with Charity there was increasing and astonishing resonance.

I didn't have to describe her to Milton. Milton had coordinated my symbolism so closely with his own I could tell the resonance directly. It fit me.

Next it was a matter of adjusting the work sheets and job requirements in such a way as to get Charity assigned to us. It must be done very delicately, so no one would know that anything illegal had taken place.

Of course, Milton himself knew, since it was he who arranged it and that had to be taken care of too. When they came to arrest him on grounds of malfeasance in office, it was, fortunately, for something that had taken place ten years ago. He had told me about it, of course, so it was easy to arrange and he won't talk about me for that would make his offense much worse.

He's gone, and tomorrow is February 14. Valentine's Day. Charity will arrive then with her cool hands and her sweet voice. I will teach her how to operate me and how to care for me. What does look matter when our personalities will resonate ? »

I will say to her, « I am Joe, and you are my true love. »

a) Written comprehension

- 1) Who is the narrator ? What effect does it have on the reader ? What does it reveal on the story ?
- 2) What are the different stages of Milton and Joe's search ?
- 3) Underline the sentences/expressions showing that Milton and Joe are doing something illegal.
- 4) Underline the sentences/expressions showing that Milton and Joe are becoming more and more alike.
- 5) What does that imply as for the end of the story ?