**Focus on speaking : Science or fiction ? pages 38-39 (POC)**

1. **I, Robot**
2. The two robots are androids and have been designed like human beings. However, while there is no doubt about Robot 1 being a robot – its mechanical joints have not been hidden – Robot 2 is much more human like. It looks like a real young woman with a female body and a face which mimics human expressions.
3. Why did Asimov imagine the Three Laws?

To establish a set of rules organizing the fictional robot world he invented. The rules were designed to protect people from harm. Even in a fantasy world, he could not bear the idea of robots taking control over human beings. He certainly wanted to place limits on human-like robots. He might have anticipated that sooner or later, science-fiction would become science fact and that the Three Laws would have to be incorporated into robots as safety features. He must have foreseen that robotic researchers would have to draw up laws for robot behaviour.

1. How can robots improve our life?

They could improve our quality of life in our homes and workplaces by increasingly taking over boring, monotonous and dangerous tasks. They can already perform household chores (some vacuuming robots are already on the market). In the future, they could help to look after the elderly (some prototypes can already help the elderly to get out of bed and remind them to take their medication. They will probably entertain and take care of children. They could also be gym instructors, office assistants….

Robots already increase workplace safety. Workers are moved to supervisory roles, sot hey no longer have to perform dangerous jobs in hazardous settings.

3b) What are the drawbacks of the robots’ increasing role in our daily life ?

Huan beings are being made redundnat. People lose their job. Robots, which are fast,a ccurate and never get tired, already replace factory workers on automated assembly lines.

In addition, robots can’t think and adapt to changing circumstances, sot hey need to be supervised.

B**) I, Cyborg**

1) What does the picture illustrate?

The word « cyborg » is a portmanteau word formed on « cybernetic »+ « organism ».

So, a cyborg refers to a creature whose powers are enhanced by computer implants and which is therefore partly human and partly machine. The picture represents a man whose body seems to include electronic components. This pictire could illustrate the cover page of a science-fiction novel entitled I, Cyborg, written by Kevin Warwick. It could also be a poster announcing a new sci-fi movie starring or directed by Kevin Warwick.

2) Explain what the picture actually illustrates

Kevin is actually a professor of cybernetics who had a silicon chip implanted in his nervous system. So the picture must illustrate the cover of the book he wrote on his experiment.

1. What does Kevin’s research consist of and why does he call himself a cyborg?

Kevin, a professor of cybernetics at the University of Reading, decided to carry out experiments on himself. In 2002, he had a silicon chip with 100 electrodes implanted in his arm. His aim was to see whether a human being could respond to stimuli generated by a computer/man and machine could interact. The experiment proved successful as, by means of the implant, Kevin was able to control an electric chair and move a distant robot arm just by his thoughts.

1. How could Kevin’s experiment be used?

His research is most likely to find applications in the medical field. It could lead to the invention of medical tools for treating patients whose nervous system is damaged – blind or disabled people for instance

**C) The bionic age**

1) Why is the man on the cover a bionic man?

He has an artificial arm attached to his body, that’s why he is said to be a bionic man.

2) Listen to CD 1 track 29

3) Explain what happened to Hugh when he was young and how he became involved in biomechanics

When he was young, Professor Hugh Herr had a terrible mountaineering accident. He was caught in a blizzard and suffered frost bite. His doctor could not save his legs which had to be amputated. He was equipped with prostheses but dreamed of climbing again. Biomechanics made this possible.