

Lesson 3 定期テスト	Improving Society with Avatar Robots	クラス	番号	名前	/50
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Read the passage and answer the questions.

“With an avatar robot, people who are confined to bed like me can also interact with people in different locations. I’ve realized we can find meaning in our lives by connecting to society.”

A man’s voice is being delivered through a robot to a large audience in a lecture hall. The voice is Banda Yuta’s, but now he is actually in bed in the hospital. The robot everyone is listening to is his avatar.

These days, people usually think that every robot is equipped with artificial intelligence (AI). An AI robot can do housework and even communicate with humans. However, an avatar robot is not equipped with AI. It only has a built-in camera, speaker, and microphone. The operator controls it remotely with a smartphone or personal computer. He or she can talk freely to people in other places, and even express emotions with the robot’s gestures. People around the robot feel as if the operator were actually there.

The avatar robot was developed by Yoshifuji Kentaro. In his early teens, he could not attend school regularly, so he often felt very lonely. Later, after entering technical college, he became passionate about developing AI to help lonely people. However, he was never satisfied with the results. He finally realized that his family and teachers, not AI, had saved him from loneliness. “I may have escaped from my lonely world thanks to interacting with real people. AI may not be able to help lonely people.”

At university, he created a new way to connect people. First, he bought a robot and disassembled it to understand how it worked. By researching online and consulting robot experts, he came up with the concept of an avatar robot. To make his robot move like a human, he studied pantomime and *kyoruri*. After a year of trial and error, the prototype of his avatar robot was born.

Avatar robots have been utilized in various fields. In the field of social welfare, they help disabled people enter society. In Banda’s case, he was in a traffic accident at the age of four. As a result, he was not able to walk or even leave his bed. However, meeting Yoshifuji completely changed Banda’s life. Yoshifuji invited Banda to try using an avatar robot. Banda gave feedback on it as a person with a disability. He also attended meetings from his bed through the robot, and began working as Yoshifuji’s assistant. Banda said, “I feel like I am needed in society, which makes me happy. With my avatar robot, I can go anywhere and do anything.”

In the field of education, avatar robots have great potential as well. A robot can be put on a desk in a classroom. With an avatar robot, even a student in the hospital can attend classes.

Moreover, he or she can enjoy chatting with classmates at recess or after school.

Yoshifuji opened a cafe staffed by avatar robots. The robots working in this cafe are larger in size than his other robots. This is because they have to move around and serve customers. People who cannot easily go out because of physical or mental issues can work there remotely. Through their avatar robots, they can greet customers, take orders, and serve food or drinks. The cafe provides employment opportunities for people who have difficulty directly participating in society.

From his experience, Yoshifuji knows that avatar robots can address the social problem of isolation. They can be “you” in public or at work. So, even if you cannot leave your home, you can still meet people, expand your world, and enjoy your life. Yoshifuji hopes avatar robots will allow more and more people to interact in the future.

問1 What has Banda realized through interaction with people in different locations? Explain in Japanese. (5点)

問2 What do people these days tend to think about robots? Explain in Japanese. (4点)

問3 Fill in the blanks to explain how an avatar robot works. (3点×4)

An avatar robot has a built-in camera, speaker, and microphone, but is not _____.
_____. The operator _____ with a digital
device. People around the robot feel as if the operator _____
because he or she can talk freely to them and even express emotions with _____.
_____.

問4 How did Yoshifuji feel in his early teens? Explain in English. (4点)

問5 Why did Yoshifuji study pantomime and *jyōruri*? Explain in Japanese. (4点)

問6 What did Yoshifuji invite Banda to do? Explain in English. (4点)

問 7 What did Banda do with an avatar robot? Give three examples in Japanese. (4点×3)

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問 8 Who does Yoshifuji's cafe provide employment opportunities for? Explain in Japanese. (5点)
