

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 Banda Yuta is giving his lecture [1]. (5点)

- ① to an audience of patients at a hospital
- ② in front of many people in a lecture hall
- ③ to a large audience of doctors in a lecture hall
- ④ while he is confined to a bed in a hospital

問2 An avatar robot is equipped with [2]. (5点)

- ① a camera, speaker, and microphone
- ② artificial intelligence
- ③ functions to do housework
- ④ a smartphone or personal computer

問3 When he was in his early teens, Yoshifuji Kentaro [3]. (5点)

- ① had many friends at school
- ② became interested in developing AI technology
- ③ did not go to school very often
- ④ developed his idea for an avatar robot

問4 Put the following events (①～④) into the order in which they happened.

[4]→[5]→[6]→[7] (5点×4)

- ① Banda Yuta became unable to leave his bed.
- ② Banda Yuta met Yoshifuji Kentaro for the first time.
- ③ Banda Yuta had a terrible car accident.

④ Banda Yuta gave a presentation to a large audience.

問5 The avatar robots that work in Yoshifuji's cafe [8]. (5点)

- ① are positioned on the counter for customers to use
- ② serve only customers with physical or mental issues
- ③ enable people who have difficulty participating in society to have a job
- ④ are equipped with AI to serve customers automatically

問6 Choose two that do NOT match the passage. [9] ・ [10] (5点×2)

- ① Operators can use an avatar robot's gestures to communicate emotions.
- ② Yoshifuji believes that AI helped him to escape from his loneliness.
- ③ As a university student, Yoshifuji took a robot to pieces to see how it worked.
- ④ It took Yoshifuji several years to build his avatar robot prototype.
- ⑤ Avatar robots can be used by students who are unable to go to classes.
- ⑥ Yoshifuji believes avatar robots can help more people to connect.