Can You Read My Mind?

Mary: I'm Mary Johnson, with *Modern Times*, Oxford Radio's monthly look at the impact of technology on our lives. This evening, we'll be discussing mind-reading technology with Dr Clive Sloane, head of the Centre for Scientific and Medical Ethics. Welcome, Dr Sloane.

Clive: I'm delighted to be here. Please, call me Clive.

Mary: Clive, technological advances in mind reading have made the news recently, and to be honest, the idea of someone being able to read my mind frightens me. I read, for instance, that researchers at a university in the USA have developed a mind-reading machine which they say is accurate.

Clive: Well, you may feel better to know that this machine is far from accurate. What they have developed is a computer program which, when used during an MRI brain scan, recognises – in a very limited way – what someone is thinking.

Mary: What do you mean in a limited way?

Clive: Well, so far when two words are shown to a participant, the program can detect which word the participant is actually thinking about. For this task, it's already got a 78 per cent accuracy rate.

Mary: Wow! That's pretty good, but I suppose it's only a matter of time before this program is upgraded and becomes sophisticated enough to be given more complex tasks other than detecting what word we're thinking about.

Clive: Well, actually a person's intentions and preferences can already be read by some machines. British and German scientists have used MRI scans and a computer program to predict – with 70 per cent accuracy – whether someone intends to add or subtract a pair of numbers, for example. And in a Canadian study using laser technology, participants were given a choice of two drinks and the computer predicted 80 per cent of the time which of the two they would choose.

Mary: That's very impressive. But my fear is that this technology will eventually be used by police, governments, even employers and schools, to force people to reveal their private thoughts. It's still not a crime to think something, and it should never be! … but one day it might – like it was in that Tom Cruise film, *Minority Report*, where people were arrested for just thinking about committing murder.

Clive: Well, that was an entertaining film, but quite far from reality. I do understand your concern, though, because it is possible that within the next ten years, mind-reading technology will be accurate enough to be used for practical uses and not just for research.

Mary: What about the potential for abusing this technology?

Clive: Well, all technological developments have the potential to be both helpful and harmful. That's why society passes laws to regulate them. For example, think of cars. We've got safety standards and laws for both cars and drivers. And the same will happen with mind-reading technology. We need to have specific guidelines and laws regarding appropriate uses for it.

Mary: And what, in your opinion, are the appropriate uses?

Clive: Most importantly, it's got medical uses. For example, people who can't speak will be able to create artificial speech with their thoughts. There will be computers that read users' minds, which will benefit everyone who can't use their hands.

Mary: That all sounds wonderful. But still, for someone, or something else to be able to read my thoughts seems wrong to me.

Clive: I think that society can determine the correct ways for thought-reading technology to be used … just as we've regulated the technology already used by the police and other authorities – things like DNA analyses and lie-detector tests, fingerprint identification and voice-recognition technology.

Mary: Thank you, Clive. You've raised some interesting issues to think about.

Answers: 1. c   2. a   3. d   4. b   5. b   6. c   7. b   8. a