Links to the Financial Times can be obtained in the library. Ask for access in the library if necessary.

**Debate 1 Proposition: Robots should not look like people**

**Resources**

1. Video

<http://video.ft.com/4870086639001/Man-or-machine-Building-robots-like-us/Companies>

2. Article

**Prospect of sexual relationships with robots poses moral dilemmas**

Maija Palmer The Financial Times, 4 May 2016

Could we fall in love with robots? Movies have been suggesting the possibility for some time, from a man falling in love with his computer operating system in the 2013 film *Her*, to robot lover Gigolo Joe offering his services to women in 2001’s *A.I*.

We are on the cusp of creating loveable robots. Leaps in artificial intelligence are making conversations with automatons less stilted, for example. One Silicon Valley company, Eternime, plans to let people create avatars of themselves that learn their speech patterns and life stories, then converse with loved ones after death.

And robots themselves are becoming increasingly lifelike. The University of Science and Technology in Hefei, China, recently unveiled Jia Jia, an attractive humanoid robot that can respond to speech and whose facial movements look natural. Ricky Ma, a Hong Kong-based inventor, created a robot that looks a little like Scarlett Johansson. She smiles, winks and responds to compliments.

Neither robot has been built for sexual purposes. However, there already exists a niche but lucrative industry in creating realistic sex dolls. California-based Abyss Creations has a line of RealDolls, humanoid figures with high-quality silicone skin and moveable limbs, fully customisable in different skin tones.

The company’s dolls do not move, speak or stand up without support. Despite this, founder Matt McMullen revealed last year on the website Reddit that he was working on ways to build artificial intelligence into the dolls.

Relationships, sex with and even marriage to robots could be normal by 2050, says David Levy, artificial intelligence expert and author of the book *Love and Sex with Robots*.

He points out we can already become fond of pets and inanimate objects, such as cars or computers. So why not robots? He further adds that the reasons humans fall in love with each other can also be broken down into fairly mundane components, such as proximity and similarity.

“If a robot is acting in ways that are very strongly reminiscent of humans, and if it gives something back — if it is providing great sex and interesting conversation — you can understand its owner getting attached to it.”

If a robot is acting in ways that are very strongly reminiscent of humans, and if it gives something back — if it is providing great sex and interesting conversation — you can understand its owner getting attached to it

Some argue that sex robots might benefit society, replacing trafficked human sex workers, for example — just as industrial robots take on tasks too dangerous or dirty for human workers.

But the prospect horrifies Kathleen Richardson, senior research fellow in the ethics of robotics at De Montfort University in the UK.

“I am worried about the impact on human relationships,” she says. “It is introducing the idea that human relationships are optional, that you can have all your needs met by a machine. But that is not true. You need other human beings.”

Despite talk of intelligent machines, at the heart of this debate is the nature of love. When we talk about robots — in love or replacing us in the workplace — we are often expressing our concerns about other things, such as the nature of male-female relations.

For example, Ms Richardson, who has founded the Campaign Against Sex Robots, proffers two arguments against sex bots. One is to do with the fact that most sex dolls resemble women and are bought by men — although male dolls are also available. Ms Richardson is concerned that, much like the proliferation of pornography on the internet, female sex robots will dehumanise women.

Creating objects that closely resemble human females, she argues, leads men to regard women as objects.

The other problem is that relationships with machines stunt our own emotional development.

“We need social interaction with other people,” says Ms Richardson. “It is what makes us human.”

Others keep us in check and teach us to negotiate and reciprocate. A relationship with a machine, programmed to obey our every wish, could turn us into spoilt children, unable to function with other humans.

Mr Levy, however, argues that robots would not replace human relationships but instead offer a substitute for those who cannot form them — severely disabled people, for example, who might struggle to find a sexual partner.

“The question isn’t whether a relationship with a robot is better, but whether it is better than no relationship at all,” he says.

3. Article & videos

# ****Uncanny valley: why we find**** human-like ****robots and dolls so creepy****

November 10, 2015 5.16am GMT

<http://theconversation.com/uncanny-valley-why-we-find-human-like-robots-and-dolls-so-creepy-50268>

**Debate 2 Proposition: Uber should be banned**

Resources

1. Articles for and against from the *Financial Times* (2017)

<https://www.ft.com/content/05523b12-a6b2-11e7-ab55-27219df83c97>

1. Article from *The Economist* (2015)

<https://www.economist.com/blogs/graphicdetail/2015/08/taxis-v-uber>

1. Some factual information (2016)

<http://www.ajc.com/business/things-know-the-uber-the-airport-debate/JTagwUnDs7uEGZlRLvBNdK/>

1. Euronews article & embedded video (2017)

<http://www.euronews.com/2017/05/11/uber-dealt-a-setback-in-taxi-versus-techie-debate>

**Debate 3 Proposition: Robots are taking our jobs**

Resources

1. Article

<https://hbr.org/2015/06/robots-seem-to-be-improving-productivity-not-costing-jobs>

1. Graph in Technology\_2017
2. Articles

<http://www.bbc.com/news/technology-33327659>

1. Wallmart’s use of robots (Videos)

<https://www.designboom.com/technology/walmart-tests-shelf-scanning-isle-roaming-robots-10-27-2017/>

<https://www.youtube.com/watch?v=tRo8ghNnB94>

**Debate 4 Proposition: Renewable energy cannot replace fossil fuels**

1. Arguments both for and against

<http://developmenteducation.ie/feature/the-energy-debate-renewable-energy-cannot-replace-fossil-fuels/>

1. Pros and cons of renewable energy

<https://www.conserve-energy-future.com/pros-and-cons-of-renewable-energy.php>

3. Vocabulary related to energy sources

<https://quizlet.com/35844273/energy-debate-topics-flash-cards/>