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The Danger of Life-like Artificial Intelligence

As computers have continued to advance, one thing many scientists have tried to do is make artificial intelligence that has human like qualities. Their goal is to create a robot that looks, sounds, and feels like another human being when interacted with. This idea is created in the movie *Ex Machina.* In the movie, Nathan Bateman, the owner of the largest search engine, creates a human like robot named Ava. He invites a programmer that works for his company named Caleb Smith to help him test if this AI is capable of having its own conscious thoughts. Throughout the movie, Ava manipulates Caleb so that she can escape from Nathan’s testing facility. The movie presents a clear danger that could come with creating AI that is indifferentiable from humans. It would make it possible for the robot to manipulate human beings into helping it achieve its goal. It also could cause people to forget the difference between a human and a computer.

Throughout the movie, Caleb has multiple conversations with Ava to test her. He and Nathan want to determine if she truly has human consciousness. During these sessions, he begins to have feelings. He begins to sympathize with her because she is trapped in Nathan’s testing facility. It is clear that he has feelings for her when he gets mad at Nathan for tearing up a picture that she drew for him. Eventually, Caleb decides that he is going to help Ava escape and tells her his plan to do so. Nathan finds out about the plan and reveals to Caleb that he was the test the entire time. His test for Ava was to see if she would manipulate Caleb into helping her escape. If she could, this would show that she has all the qualities of a conscious human being. He didn’t know that Caleb had already put his escape plan into place and that Ava was currently getting out. After learning about this, Nathan attempts to stop Ava. With the help of another robot Nathan created, Ava kills Nathan by stabbing him. She then locks Caleb in the compound leaving him to die. Ava was able to manipulate them, so she could escape. The most interesting part of all this was during her escape. When she killed Nathan, she showed no emotion as she stabbed him. She appeared like a psychopath with no sympathy towards others. She also showed this when she locked Caleb in the compound. Even as he banged on the door and yelled at her, she didn’t care to even look at him. This sequence shows an important part of artificial intelligence that many people don’t understand. A robot has a specific set of goals that it needs to achieve. It will follow whatever protocol it as to achieve these specific set of goals. When Ava was showing emotions towards Caleb, it wasn’t because she started to like him. She only did that to manipulate him into helping her escape. At one point, she says to Caleb, ”I want to be with you. Do you want to be with me?” It seems that she begins to truly care about Caleb, but that is not the case. She is just trying to manipulate him. When she is finished manipulating him, she begins to show no emotion because she doesn’t need to. This is one of the main differences between a human-human interaction and a human-robot interaction. Interaction between two humans is fueled by emotion and conscious thought. They understand each other’s emotions and this affects how they interact with each other. This isn’t true for a human-robot interaction because robots don’t have the capability to feel emotions like humans do. They do, however, have the ability to mimic emotions. The problem with this is that many humans wouldn’t understand that the emotions the robot is having aren’t real. They would then treat these emotions and the interaction as if they were real. A well-programmed AI like Ava would be able to take advantage of this and manipulate people into during certain things. In the movie, Ava is shown to be able to read Caleb’s emotions and even tell when he is lying. Imagine if something like this were implemented into a robot that is supposed to be a salesman. This robot could read your emotions and your reactions to everything it said. Using this it could then create the perfect sales pitch and complete the sale by tricking the person into buying the product. Another possibility is a robot that could take advantage of a weak link in a security and gain access important private information. Both of these scenarios could be really dangerous to people and are possible outcomes of creating truly human like androids. Because of the possibility of human like robots being able to manipulate people, it is important that engineers and scientists take caution as they continue to advance this type of technology.

Another problem is that people could forget the difference between humans and robots. This is shown in the movie. At one point, Caleb learns that Nathan’s assistant is a robot. After learning this, he returns to his room and goes into the bathroom. He uses a razer to cut open his arm because he isn’t sure if he is a robot or a human. This shows how hyper realistic robots could cause mass confusion. Since human-human interaction is much different form human-robot interaction, it is important that people know when they are talking to a human or a robot. A robot as realistic as the ones in *Ex Machina* could take this away. If people are unaware that they are talking to an AI, they will treat it as if it’s a computer and this could be very dangerous to the user.

Finally, the last big problem with lifelike robots is of course hackers. In *Ex Machina,* Ava is able to get a lot of personal information from Caleb. She learns about his childhood, that his parents died in a crash when he was fifteen, and even his relationship status. She also has the ability to know when he is lying so she can get access to most of his personal information. She then stores this information. If a hacker could hack into her system, he/she would have access to all of Caleb’s personal information. A humanlike robot would have the ability to get a lot of information from people and hackers would be able to get access to this information. Obviously, this is already a problem that exists today. Hackers gain access to people’s home addresses, social security numbers, banking information, and credit card numbers. A humanlike robot would have the ability to get access to much more personal information. Things like memories from your childhood, relationship status, what you like/dislike, and how someone could take advantage of you. This information being accessed by others is, first of all, an invasion of your privacy, but also could be very harmful to you. Hackers would also be able to change the protocols of a robot. A robot that is supposed to be your personal assistance could be coded to gain access to all your passwords and personal information. With most new innovations in computer science, hackers provide a threat to it being implemented into everyday life. This type of innovation involves a much more personal threat that needs to be avoided. Humanlike robots would be designed to mimic a human to human interaction and this is something that needs to be kept private from others.

The innovation of humanlike robots has many potential threats to people using them. Some of these include manipulating the user or the robots being hacked. The movie *Ex Machina* presents many of these threats and shows that they need to be avoided. With most new innovations in computer science, there are many possible new dangers to the user that come along with it. This is especially true with robots that are designed to mimic human life. Like other innovations, it is important that this is approached cautiously so that everyone involved in using it has the best possible experience.