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Reading 3 – collaborative robotics

Robots, robots everywhere!

The robotics of this world started off being introduced in a secluded environment to work with, you had to know all there is to robots to be able to even be in the same room as them. Nowadays, they are able to interact with workers of various degrees of knowledge to factory workers to university researchers to engineers; robots have begun to work alongside the humans, in harmony, for now. Robots have become part of everyday workforces. So far robots, as wonderful as they have been innovated immensely, can be deemed to be highly intelligent and can improvise on a certain level, they still cannot replace the human, and can for now simply work alongside them. Many robots can undertake multiple complex tasks, but only to a certain extent, for example, surgeries and taking over the driving in a car, they can only do so much, as they cannot compute new surprises without some assistance. Though it is said that robots cannot completely replace the human in most work areas, they are still being viewed negatively by a large amount of the public. Constantly seeing the technology of robotics as dystopic and somehow could start to think independently and overthrow the human race; terminator. Although unlikely this can cause companies to password protect the programs in robots. Making them concrete in their tasks and not learning new forms of tasks. For robots to become increasingly integrated into a workforce with humans they need to establish designer ground rules, which include, interactivity to uphold a humanistic approach with its fellow human workers to create a relationship and provide adequate cooperation effortlessly. Designing robotics must allow for collaboration and stay away from programming a box and letting it remain the same forever. Another important design feature is to be mindful of human error, and carelessness, the robots should have in their systems already established protocols to act appropriately should a case of such human

error arise. This also includes awareness on the robots part, as they are interacting with flexible and organic entities they need to be aware of their own power capabilities in handling various materials. Being aware of their surroundings entails awareness of communication with people; using gestures, sounds, and other sensor signals is key to ensuring safety amongst robots and humans. Incorporating human-like gestures and reactions can create a positive relationship between the robot and the people, it allows for easy flow of work and communication effortlessly. Creating a robot that can present feedback and customizability is necessary for designers to keep in mind when creating robots. The future is with robots that is a known fact, and how we go about making them just as adaptable and independent as humans is the next step!