What if Robots Take Our Jobs?

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First Unitarian Church of Saint Louis
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READINGS:

— Isaac Asimov from the "Introduction" to, *Adding a Dimension: Seventeen Essays on the History of Science* (1964)

A number of years ago, when I was a freshly-appointed instructor, I met, for the first time, a certain eminent historian of science. At the time, I could only regard him with tolerant condescension.

I was sorry of the man who, it seemed to me, was forced to hover about the edges of science. He was compelled to shiver endlessly in the outskirts, getting only feeble warmth from the distant sun of science- in-progress; while I, just beginning my research, was bathed in the heady liquid heat up at the very center of the glow.

In a lifetime of being wrong at many a point, I was never more wrong. It was I, not he, who was wandering in the periphery. It was he, not I, who lived in the blaze.

I had fallen victim to the fallacy of the "growing edge;" the belief that only the very frontier of scientific advance counted; that everything that had been left behind by that advance was faded and dead.

But is that true? Because a tree in spring buds and comes greenly into leaf are those leaves, therefore, the tree? If the newborn twigs and their leaves were all that existed, they would form a vague halo of green suspended in mid-air, but surely that is not the tree. The leaves, by themselves, are no more than trivial fluttering decoration. It is the trunk and limbs that give the tree its grandeur and the leaves themselves their meaning.

There is not a discovery in science, however revolutionary, however sparkling with insight, which does not arise out of what went before. "If I have seen further than other men," said Isaac Newton, "it is because I have stood on the shoulders of giants."

"How Robots and Algorithms are Taking Over" (excerpt) by **Sue Halpern**, April 2, 2015

In September 2013, about a year before Nicholas Carr published *The Glass Cage: Automation and Us*, his chastening meditation on the human future, a pair of Oxford researchers issued a report predicting that nearly half of all jobs in the United States could be lost to machines within the next twenty years. The researchers, Carl Benedikt Frey and Michael Osborne, looked at seven hundred kinds of work and found that of those occupations, among the most susceptible to automation were loan officers, receptionists, paralegals, store clerks, taxi drivers, and security guards. Even computer programmers, the people writing the algorithms that are taking on these tasks, will not be immune. By Frey and Osborne's calculations, there is about a 50 percent chance that programming, too, will be outsourced to machines within the next two decades.

To understand the economics of this transition, one need only consider the American automotive industry, where a human spot welder costs about $25 an hour, and a robotic one costs $8. The robot is faster and more accurate, too.

SERMON

Do you remember that time your cellphone tried to kill you? In fact, though cases of malfunctioning technology are common, bloodthirsty technology is non-existent. Despite this fact, we tell many stories of robots choosing to kill or control us. Almost all science-fiction stories tell us to watch out for technology. Even a movie like 2001: A Space Odyssey, which also celebrates technology as part of human advancement, contains a killer computer. The very first work of science fiction to use the word "robot, Karl Capek's *RUR,* features a robot rebellion. And this spring, one can see movies in the theaters in which artificial intelligence turns on its creators such as *Avengers: Age of Ultron, Ex Machina, Chappie,* and *Terminator: Genysis.*

We know that robots of a sort are invading our lives. The writer Nicholas Carr points out that the average airline pilot is now at the helm of an airplane for about three minutes per flight because all the rest is done by auto-pilot. He tells us that Xerox Corporation uses computers to select which applicants to hire for its call centers, and the retail giant Amazon "employs" 15,000 warehouse robots to pull items off the shelf and pack boxes. And thus, Ms. Halpern writes about "How Robots and Algorithms are Taking Over."

Elon Musk, the CEO of car-maker Tesla Motors gave our fear a theological twist when he said, "With artificial intelligence, we are summoning the demon." Likewise, the very intelligent and famous theoretical physicist, Steven Hawking said, "the development of full artificial intelligence could spell the end of the human race."

Isac Asimov, back in the middle of the 20th Century, called this "the Frankenstein complex" a tendency for our stories to reflect a fear that the robots we make will turn against us. In response to this trend, he wrote stories in which people put fail-safe features into robots, including his famous rules of robotics to control robot behavior. There is always a fear that any tool, from a car to a chainsaw, from a hammer to an ax, can be used wrong or go awry and cause serious damage. The same goes for computer controls in cars or programs engaged with the stock market. As Asimov pointed out, this fear is tempered by good engineering and basic safety systems. But the fear of robots runs much deeper. We fear that the computers will take all our jobs, making us all "redundant" as the British put it.

Nicholas Carr, in his book *The Glass Cage: Automation and Us,* points out that the term for what happens when machines replace human workers was coined by John Maynard Keynes in 1930. He called it "technological unemployment." At that time, the mechanization of our railways had put nearly half a million people out of work. In the

same years, rotary phones were replacing switchboard operators, and mechanical harvesters, plows, and combines were eliminating much human labor on farms. Machine efficiency was becoming so great that President Roosevelt, in 1935, told the nation that the economy might never be able to reabsorb all the workers who were being displaced. Of course, World War II helped fix that problem, and the economic boom that followed after. One character speaking in Asimov's robot story "The Inevitable Conflict", put it this way:"

> "Every period of human development, Susan, has had its own particular type of human conflict---its own variety of problem that, apparently, could be settled only by force. And each time, frustratingly enough, force never really settled the problem. Instead, it persisted through a series of conflicts, then vanished of itself---what's the expression---ah, yes, 'not with a bang, but a whimper,' as the economic and social environment changed. And then, new problems, and a new series of wars."

So, in the end, the thing we fear the most is ourselves. Our real fear is not that computers and robots will replace us, but that no one will care if that happens. We fear not just that people will be out of work, but that no new work will arise and that certain people, especially in the working class, will be "cast off" as useless. We fear not only people will be without useful work, but that jobless people will starve, grow ill, and die in our world because it lacks compassion. That is why we have gathered in this church, to help uncover and develop the spiritual resources to make this a world of justice, human dignity, and compassionate Love. We do fear what happens when we lose our jobs.

We also project a deep fear of people being a cold and unfeeling, onto robots. We fear that people are like robots rather than the other way around. The recent movie *Ex Machina* is in a small way, simply an old hetero-male fantasy that women in a male dominated society are all, in fact, cold-hearted and deadly. Any society that oppresses a class of people fears the people they oppress. Likewise, we fear those in charge of oppressive societies. We fear that the people who create robots are cruel people, and the robots will embody their exclusive love of efficient profits above people.

But human integrity and deep love are powerful things. People do often lack integrity. People say that they care, and then act differently. But in the end, the human brain and human intellect are oriented toward meaningful relationships. Our minds have amazing powers to create harmony, and wholeness, ethical integrity, and even moral beauty, both within each self and in society. I have seen people transformed by love. One man I met had become a UU in prison because the chaplain there was UU. He had lived a life of fear and anger for almost three decades. But in prison he began to awaken to love, and self-discipline, reason, and compassion. Eventually, he was released, and a UU church helped him find a job, community, and meaning.

Sometimes we call the dimension of meaning and integrity, "Soul". That is the second most important function of religion, to help guide the soul of society and help each person develop their soulfulness.

Daniel C. Dennett, a prominent American philosopher whose research centers on philosophy of mind and biology. Once, an Italian editor put this title on an article about Dennett, "Yes, we have a soul, but it's made of lots of tiny robots." Dennett upon reflected on this title and later explained his response.

> "I thought, exactly. That's the view. Yes, we have a soul, but in what sense? In the sense that our brains, unlike the brains even of dogs and cats and chimpanzees and dolphins, our brains have functional structures that give our brains powers that no other brains have - powers of look-ahead, primarily... and to reflect and to evaluate and to evaluate our evaluations, and evaluate the grounds for our evaluations. It's this expandable capacity to represent reasons that we have that gives us a soul. But what's it made of? It's made of neurons. It's made of lots of tiny robots. And we can actually explain the structure and operation of that kind of soul, whereas an eternal, immortal, immaterial soul is just a metaphysical rug under which you sweep your embarrassment for not having any explanation."

Though I disagree that we utterly different or separate from animals and plants and the web of life, I do agree that our brains are marvelous tools of the soul. The mind is the soul. The Integrity of intellect and "humanness" of the heart joined lead to liberation and wholeness and glory.

Finally, our fear of robots arises from a basic existential fear of death and of unintended consequences. In a chaotic world, it is essential to remember our grounding, the roots of spiritual well-being. Millennia ago the writer of Psalm 20 examined human reliance on technology as icons of power: "Some trust in chariots and some in horses, but we trust in the name of the LORD our God." I do not know what exactly is 'God' for you or how you understand that word. But I am certain that each person has a sense of what calms us and give us hope. I believe it was The Monster in the story about Dr. Frankenstien who said, "The starry sky, the sea, and every sight afforded by these wonderful regions, seems still to have the power of elevating [a man's] soul from earth. Such a man has a double existence: he may suffer misery, and be overwhelmed by disappointments; yet, when he has retired into himself, he will be like a celestial spirit that has a halo around him, within whose circle no grief or folly ventures."

Remember, next time your computer seems bent on ruining all your good intentions, or maybe your toaster looks like it wants to kill you. Just stop and take a moment to re-ground your soul; to breathe; to awaken to peace, deep peace and the unconditional love within and beyond all things. Then get up and help others, embody the care and compassion and justice that you want to see. And, if you get a chance, program your robot to do the same.