WHEN ROBOTS GET PHYSICAL WITH HUMANS

The year is 2035, and robots are common assistants and workers for human owners in the movie "I, Robot." It is the story of a Chicago Police Detective, Del Spooner, and his investigation into the murder of Dr. Alfred Lanning, who works at U.S. Robotics, in which a robot, Sonny, appears to be implicated in the murder of the good doctor. Detective Spooner, who suspects Sonny, is called "robotophobic" by everybody. But in the end his suspicions turn out to be right.

So what went wrong? Murder of, even aggression toward, humans was never supposed to happen in this fun bit of science fiction. The potential threat, the ones humans were so afraid of, robots taking charge and ruling over humans was supposed to be kept in check by design, within the constraints of the **Three Laws for Robotics**, as laid out by Author Isaac Asimov, who wrote the book of the same name.

1. A robot *may not injure a human being* or, through inaction, allow a human being to come to harm.
2. A robot *must obey orders given it by human beings* except where such orders would conflict with the First Law.
3. A robot *must protect its own existence*, as long as such protection does not conflict with the First or Second Law.

"I, Robot" is science fiction, but we are quickly entering a time when we must begin to ask, is it plausible? Does it have any elements of reality? Could it be that in just 15 years from now, A.I. (artificial intelligence) technology will evolve the computer, our compuer, to the level of robotics depicted in the "I, Robot?" Before we can even hope to answer that question, we should travel 38 years back in time, and then we'll get **Back to the Future** to see how plausible the answer may be.

The IBM PC Revolutionizes Home Computing in 1981
I had just graduated high school in June 1981, and by August, I had started my job as Bank Teller at the Bank of Coronado where the bank had just ordered their first IBM 5150 PC (personal computer), powered by the Intel 8088 processor. Even the "mouse" was first introduced commercially in 1981. Before the end of that summer, the IBM PC was already recognized as the machine that would revolutionize the way humans interact with "the computer" at home and at work.

By 1983, I would be playing with spreadsheets using Lotus 1-2-3, and in just another four years I would be working with spreadsheets using Microsoft Excel.

The buzz and excitement of the personal home computer was both unstoppable and profound.

True Story: How I Got Cyberphobia from the 1980's "Computer Wants a Cookie"
During the few years that followed the 1981 introduction of the IBM PC, I developed "Technophobia", or more specifically, in 1985 my fear of computers was coined "Cyberphobia" *by a computer story*.

I'm going to really expose myself to criticism here, but I have to admit that my Cyberphobia came about because of a recurring story told among my colleagues in banking about a computer that seemed to be possessed. As the story went, back in the early 1980's, there was a computer that would not turn on, except for four words that were displayed on the computer monitor, **"Give me a cookie."**

The worker would even disconnect the power cord and the computer monitor would still display the words, **"Give me a cookie"!**

The worker brought in other people familiar with the computer to help, and nobody was able to get the computer to work. **True story**, the 1981 account about the computer wanting a cookie was really told among my colleagues. I'm not saying the story about the computer not working was true, or at least I had to real proof the story was true, but the fact that the "story" was "told" to me and others by my banking colleagues is 100% true!

Isn't it interesting that *TODAY computers really are asking you for cookies*? Click here…

Whenever I want to check my stock quotes, NASDAQ.com will tell me that their computer website needs "cookies". Computers asking for their cookies are found on websites all over the World Wide Web today!

Here's the complete wording from the computer at NASDAQ.com:

This website utilizes cookies and similar technologies for functionality and other purposes. Your use of this website constitutes your acceptance of cookies. To learn more about our cookies and the choices we offer, please see the link to our Cookie Policy.

This story about the possessed computer and its request for a cookie scared me, irrationally obviously, but it still scared me and caused me to approach the personal computer with great caution.

I was so scared, in fact, that it affected my college experience with computers.

An "F" Grade in Computer Information Systems (CIS) 101 Class in College

In 1986, I quit my job at Bank of Coronado after spending five years searching for a pathway to get into San Diego State University (SDSU). Finally, I discovered community college as my avenue to SDSU and their College of Business program. (I will write more on the vital role of community colleges in a future CitySpeak newsletter.)

Anyway, one of my first college classes in 1986 was the CIS 101 computer class. Needless to say, I flunked CIS 101 in 1986 and again in 1987. This was not because I was not smart enough to pass this class. No, the reason was specifically due to my computer phobia: **Cyberphobia**.

Keep in mind that a "phobia" is labeled when "extreme or irrational fear" is present. Today I do not believe I have Cyberphobia, although I maintain a healthy concern for not losing my humanity to technology and computers. And back in 1986, I was sent to meet with my college counselor to find out why I was failing the CIS 101 computer class. The college counselor set me straight. She assured me in no uncertain terms: "you must take CS101, and you must pass this class if you are ever to transfer to SDSU and earn your business degree. Whether you like it or not, the computer is here to stay. COMPUTERS ARE THE FUTURE!"

I did of course retake CIS 101, and, recognizing it was a requirement for my college degree, I did pass the class with a "B," well above the "F" I had earned on the first two attempts.

Can you believe I really thought I could get through life without the computer? Well, not really. I really always knew the computer was here to stay. I just wanted to not become a slave to the computer. Even today, I often wish I could just get rid of my cell phone and my computer, but then I realize that even this CitySpeak newsletter I am writing now would not be possible without them. Certainly, the typewriter has gone the way of the dinosaur since the early 1980's. And even if I wrote this CitySpeak article on a typewriter, I doubt I would have enough time to get an edited and spelled-checked document in time to publish it in a timely manner.

I hope the information that follows in this article resonates with those of you who were out of high school

by 1981, and maybe this will even resonate with younger people who, although they have whole-heartedly embraced technology, are well aware of the need to preserve the human touch and keep the human spirit alive in our planet.

THE COMPUTER IN 2019

Today the computer means so much more to the user, and it is exponentially more powerful and less expensive than in 1981. The IBM PC in 1981 had 4.77 MHz performance and 256k memory, compared to the 1.3 GHz performance and 1GB of memory of the smaller Apple iPhone 5 device.

To be sure, there are many computer devices we use in our daily life today. Some are overkill and a duplication of computing power. Here are the most common devices we refer to as a computer:

1. Our computer workstation, or personal computer (PC).
2. Our laptop.
3. Our tablet.
4. Our cell phone.
5. Our watch phone (wearable technology).
6. Other digital devices that manage computer data and programs.

There are many computers that we use every day, however, the most powerful machine, relative to its size, is our cell phone (mobile device), one we keep within inches of our bodies at all times. Many people even wear their computer device, like the Apple or Android wrist watch, even going to the bathroom and to bed with it on.

Yes, computers have become a lot more important to our life than they were in 1981. Try asking a teenager or other person to give up their cell phone for a single day even!

Today, with Siri and Alexa and Bixby, we are now even talking to our computers, and these digital assistants answer us with increasingly smart responses.

Who needs people when I have such a smart technological device in the palm of my hand?

WHO NEEDS PEOPLE WHEN I HAVE A COMPUTER?

It is noteworthy that in the last decade, I have personally observed a growing number of people, young and old, turning to the computer (and social media) for companionship? Could it be that people have given up on human interaction now that the computer provides virtual friendships through exciting apps, programs and social media sites? The mobile cell phone device is surely powerful. With it, we can open the door to a community of billions of people in the palm of my hand.

What will happen to us when we can simply get home from work and "dock" our cell phones inside of our robot, which is powered by the latest A.I. (artificial intelligence) computing resources?

What happens when the computer really becomes our robot, more important and powerful than our cell phones because it can obey more of our commands and perform the mundane tasks for us humans?

What happens when our robots get physical with us?

Click here to view an interesting robot.

HOW FAR WILL WE GO WITH A.I. AND ROBOTS?

We have lots of questions but fewer answers regarding A.I. and robots at this time, yet I have to ask another question, how far will we allow that computer we accepted into our homes in 1981 to go? That first real home IBM home computer was used mostly for basic tasks, like keeping track of recipes, lists, and other simple records.

Think how far we've come since 1981. This question is most relevant to men and women who were adults 38 years ago, but even those younger than us can hopefully realize that our TOLERANCE for accepting the fast pace of evolving technology has moved "the" computer, a lifeless thing designed to help me, to now become "my" computer, a truly lifelike extension of myself that I am helpless without.

If we look back 38 years to 1981 and measure the rate of change and our acceptance of such change, is it really so far-fetched that the computer or rather, the computer technology of A.I. (artificial intelligence) will result in our acceptance of similar technology to what is depicted in "I, Robot?"

Below are some predictions I've compiled for us, as responsible, active citizens, to ponder. Not that you or I can do anything about it, but they are worthy of pondering nonetheless. Certainly, there are people a lot smarter than you or me contemplating the social, legal, and ethical issues, among others, as A.I. is facilitated in its evolutionary process. Thank God for that!

Keep awake and watch as A.I., and even A.G.I. (Artificial General Intelligence) takes front and center stage during the next decade.

Again, technology will plow forward, with or without your or my approval. Make no mistake about it, the power of the computer has been unleashed and it will evolve exponentially at super speeds that nobody can really predict.

The well-intentioned, yet aging members of Congress will try to do their best to push for imposing transparency and accountability from the technology giants to protect the American people from the flaws of imperfect design that are moving technology forward, yet robots will likely be in many homes in the near future regardless.

Some believe we are in danger of losing our humanity and our human spirit if computer science evolves unquestioned and unaccountable. We must always remember that humans are more important than machines, even if we find those machines to be more satisfying, at times, to us than real humans.

Surely, as we evolve to embrace the new culture that allows us to proudly display and possibly present our robot to our friends, we may become creative in the way we abdicate our human responsibilities to a machine.

Who knows? Maybe we will want to introduce our designer robot to our neighbors or even to our neighbor's robot directly, to see which (who) has the best functionality or intelligence.

But what if we become too lazy to notice that we are delegating "too much" to computers? What happens when we realize that it is not you introducing your robot to your neighbor, but it is actually your robot introducing you to your neighbor or your neighbor's robot?

Hello neighbor, this is Sophia, my robot. She is a great cook and she bakes wonderfully.

Now would you like to taste some of her latest cookies? ☺

I hope you enjoyed this article.

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