Exploratory Robots

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The history of exploratory robots begins rather late in the social aspect of our history, but the predecessors of exploratory robots began at the early age of 350 B.C. When a brilliant Greek mathematician named Archytas invents a mechanical bird titled “the pigeon.” (J. Isom, 2005) The mechanics were powered by steam and introduced the world the first self moving automata. Over one thousand years later in the year of 1495, Leonardo DaVinci designs a mechanical automaton that looks like an armoured knight. Leonardo designed the ‘robot’ to move as if a real person was inside. (J. Isom, 2005) From this creation many other inventers created similar automatons to amuse the royalty or for rare attractions. After hundreds of years of altering Leonardo’s original concept, Nikola Tesla creates a remote controlled robot boat in the years of the industrial revolution (1898) showing the true potential of robotics. (J. Isom, 2005) When robotics became more realistically accepted by society in the late 1940’s a movie named “The Day the Earth Stood Still” was released in theatres. The movie featured an alien named Klaatu and his robot Gort. The thought that in the near future robots could be possible became a more accepted ideology by the people. Around 1962 the first industrial robotic arm (the Unimate) is introduced to automotive factories. It is designed to complete repetitive or dangerous tasks on a General Motors assembly line. (J. Isom, 2005) This was a break through, since it was the first robot to begin working and helping human society. The Unimate caused quite a stir in the 1960’s society, since Factories were now replacing Humans with robots to complete jobs. Pretty soon robotic intuitions were popping up everywhere increasing the research rate dramatically. Due to these institutes many discoveries were made such as, editable programs, computers, and simple self motored robot arms. Causing the first walking robot to be created and presented in 1989 by the Mobile Robots Group at MIT. (J. Isom, 2005) The robot was named Genghis, and managed to shock the public on the ability it had to recognize where to walk and how to walk in the first place!

Finally in 1993 the first exploratory robot was released into the treacherous depths of Antarctica. An 8 legged exploratory robot named Dante descends into Mt. Erebrus Antarctica, in the hopes of collecting data from such a harsh environment as to simulate what might be found on another planet. Unfortunately the mission fails after a short 20 foot decent, Dante's tether snaps dropping Dante to the dark abyss of the creator. One year later another exploratory robot is created, Dante II. A similar version of Dante made more robust. Dante II was sent down into Mt. Spurr, an Alaskan volcano. (J. Isom, 2005) The mission was a success, making Dante II the first exploratory robot to successfully explore an inhabitable (to humans) section of the earth. In 1997 a revolution occurred when the Pathfinder Mission lands on Mars. The robotic rover “Sojourner,” begins gathering data from the distant planet Mars, creating a new front in exploratory robotics. (J. Isom, 2005) The post industrial society had finally reached another front in humanities endeavours. The world was witnessing pictures of soil and rocks from a total different planet and environment. The search for distant life forms began. As the year 2003 approaches NASA releases the development of more exploratory robots to search our Earth as well as Mars, and possibly the far reaches of space. When 2004 arrives “spirit” and “opportunity” are launched to Mars to investigate the possibilities of water and life forms on the
planet. (J. Isom, 2005) Now the future of exploratory robots consists of endless possibilities to open the Earth to more distant reaches of space and itself.

Given that exploratory robots didn’t exist in the pre-industrial and industrial years they couldn’t have affected society and its social settings, since society would construct knowledge for each other based upon its environment, as well as creating a culture of shared values based on the discovered knowledge. In the pre-industrial and industrial times an individual would be assimilated within the culture, and although exploratory robots weren’t part of this culture, its predecessors were a vast part of helping society form itself into what post-industrial society is now. Within the pre-industrial periods mechanical discoveries such as automatons were mostly used to impress royalty or the public. In other words the discoveries made were mostly portrayed as art. This was due to royalty that ruled the land and they liked the way it was, meaning the development and increase in technology would progress at a much slower rate. In the industrial age technology bloomed and people started to notice the true potential of robotics in its simpler forms. Steam powered automatons were used as the examples for the transformation of steam powered engines and helped shape new technologies for the benefit of production and industrialization. Technology didn’t stop in the industrial society, as the post-industrial society became established and an economic structure became noticeable, the next step was to make technology benefit the economy creating another bloom. As more freedom was granted to the technology that was being discovered, more and more different types of robotics were being developed. When exploratory robots were finally released the public began to see aspects and new discoveries in our own world, creating curiosity of our world and other worlds. Finally when exploratory robots were being sent to the distant planet of Mars and the public lade their eyes on the first footage and images of another planet, this caused a revolution in the post-industrial society. People want to know more about their world and what is found in the darkness of space. Now billions of dollars are being placed in the research and development of exploratory robots that are going to explore the far deep reaches of our earth and space to find new discoveries and may be a cause to shape the future itself.
References


