

ARTIFICIAL INTELLIGENCE AND ITS EVOLUTION FROM SCIENCE FICTION TO REALITY

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6/04/2017

0.1 INTRODUCTION

The beginnings of artificial intelligence are traced to philosophy, fiction, and imagination. Early inventions in electronics, engineering, and many other disciplines influenced AI. The intellectual roots of AI, and the concept of intelligent machines may be found in Greek mythology.

0.2 HISTORY

AI is not a new concept; its story telling roots go as far back as Greek antiquity. However, it was less than a century ago that technological revolution took off and AI went from fiction to very plausible reality.

Alan Turing, British mathematician and WW2 code breaker is widely credited as being one of the first people to come up with the idea of machines that think in 1950.

Alan Turing created the Turing Test, which is still used today as a benchmark to determine a machines ability to "think like a human. Though his ideas were ridiculed at the time, they set the wheels in motion, and the term "artificial intelligence" entered popular awareness in the mid-1950s after Turing died.

0.2.1 Ancient History

Greek myths of Hephaestus, the blacksmith who manufactured mechanical servants, and the bronze man tools incorporate the idea of intelligent robots. Many other myths in antiquity involve human-like artifacts.

4th Century B.C

Aristotle invented syllogistic logic, the first formal deductive reasoning system.

13th Century

In 1206 A.D., Al-Jazarigb, an Arab inventor, designed what is believed to be the first programmable humanoid robot, a boat carrying four mechanical musicians powered by water flow.

15th Century

Invention of printing using movable type, Gutenberg Bible printed (1456). Clocks, the first modern measuring machines were first produced using lathes.

17th Century

Early in the century, Descartes proposed that bodies of animals are nothing more than machines. Pascal created the first mechanical digital calculating machine (1651), containing a mechanistic and combinatorial theory of thinking.

19th Century

Joseph Marie Jacquard invented the Jacquard loom, the first programmable machine, with instructions on punched cards. George Boole developed a binary algebra representing "laws of thought" (1854).

20th Century-First Half

Torres y Quevedo built his chess machine "Ajadrecista", using Electro, a mechanical man, introduced by Westinghouse Electric at the world's fair in New York (1939).

0.2.2 Conclusion

Artificial intelligence is taking root in our everyday lives. We're still a few years away from having robots at our beck and call, but AI has already had a profound impact in more subtle ways.

Weather forecast systems, email Spam filtering, Google's search predictions, and voice recognition such as Apple's Siri, Microsoft's Cortana, are all examples.

What these technologies have in common are machine learning algorithms that enable them to react and respond in real time. There will be growing pain as AI evolves, but the positive effect it will have on society in terms of efficiency is immeasurable.