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Essay 1: Argument Identification, Analysis, and Evaluation about John Searle's Chinese Room argument against Strong AI

Searle's Argument Against Strong AI

John Searle works in the philosophy department at the University of California at Berkeley. Searle believes that only things with brains can think for themselves. A computer or machine is capable of doing things only because of the program that is within the machine. John Searle states, "[S]trong AI has little to tell us about thinking, since it is not about machines but about programs, and no program by itself is sufficient of thinking" (Searle, 1980). This is his answer to "can machines think?" and because it is the program that runs the machine and the program cannot think for itself then a machine is also unable to think for itself. His main argument is that this so called Strong AI can be disproved by his idea of the Chinese Room argument.

The Chinese Room argument is an interesting concept to counter the idea of Strong AI. What it is, is a room where a person is inside of, there are Chinese speakers who insert questions into the room for the person to figure out the answer. The person within the room does not know a lick of Chinese but they do however know English. The person in the room has instructions that tell him or her what are the appropriate Chinese symbols to answer the questions. The instructions are basically a English to Chinese translation. "The heart of the argument is an imagined human simulation of a computer, similar to Turing's Paper Machine. The human in the Chinese Room follows English instructions for manipulating Chinese symbols, where a computer "follows" a program written in a computing language. The human produces the appearance of understanding Chinese by following the symbol manipulating instructions, but does not thereby come to understand Chinese. Since a computer just does what the human does—manipulate symbols on the basis of their syntax alone—no computer, merely by

following a program, comes to genuinely understand Chinese" (Cole, 2004). This is the best explanation of the Chinese Room Argument. This argument shows something very interesting. This is not a computer doing what a human can do, it is a human carrying out operations that a computer could do. This proving that humans can solve problems, that can be coded into computers, that the computer will carry out on its own.

When the question of "Could a machine think?" is proposed, Searle says, "The answer is, obviously, yes. We are precisely such machines." But when thinking about a man-made machine, can it also think? Searle thinks that it is possible but only if the machine has a "nervous system, neurons with axons and dendrites, and all the rest of it, sufficiently like ours" (Searle, 1980). This idea of a machine having a nervous system where it can feel everything, and have neurons that send signals to our brains and such that is identical in ways to our bodies seems to be a stretch. This supporting Searle's argument of Strong AI being insufficient or unable to independently think for themselves.

A big point that is repeated throughout Searle's paper is that the important factor in whether a machine can think for itself and whatnot comes down to who in the case is the instantiating the given outcome. Searle claims that humans are the ones that instantiate computers and machines because we program them. Therefore, it is impossible for a machine or computer to think for itself because humans are the ones that gave the machine the ability to perform specific tasks. Because of this, Searle asks the questions, "But could something think, understand, and so on solely in virtue of being a computer with the right sort of program? Could instantiating a program, the right program of course, by itself be a sufficient condition of understanding?" (Searle, 1980).

Searle believes the answer to the question is still no because “formal symbol manipulations by themselves don't have any intentionality; they are quite meaningless” (Searle, 1980). He says that is a computer has a mind it is only because of the people who programmed it, there is no way the computer is learning things by itself. He states that there are those who send in the input and those who interpret the output which is like a programmer applies the computer the knowledge to answer input and the user of the computer receives the output. This is exactly what was going on within the Chinese Room example.

Searle gives a very convincing argument to prove that Strong AI is not and will not ever be capable of thinking like humans do. The experiment of the Chinese Room is a great way to represent how a human can act like a computer in which it does not conclude that a computer can operate like a human. The fact that a computer is programmed to perform its tasks by a programmer goes to show that without the help of a programmer a machine would not be able to do anything.

References

Searle, John. R. (1980) Minds, brains, and programs. Behavioral and Brain Sciences 3 (3): 417-457

Cole, David. "The Chinese Room Argument." Stanford Encyclopedia of Philosophy. Stanford University, 19 Mar. 2004. Web.