Alexa Tsintolas

Critical Response #2: Turing’s “Computing Machinery and Intelligence”

In “Computing Machinery and Intelligence,” Alan Turing poses the question: Are machines capable of thinking? To avoid a debate about the meaning of the terms machine and think, he rephrases his question: Could a digital computer fool an interrogator into thinking that it is a human in the Imitation Game or Turing Test?

Turing describes the Imitation Game as the simultaneous interview of a digital computer and human being by another human over some channel of written communication. The interrogator’s goal is to identify, based on the responses given by the computer and the human, which one of them is the human being. The game is complicated by the fact that the human and the computer are both trying to convince the interrogator that they are the human. Turing suggests that if the digital computer tricks the interrogator into identifying it as the human, it can be considered a thinking machine.

He believes that it is indeed possible for such a computer to pass the test. Due to the universality of digital computers, or the ability of a digital computer to run any program, Turing claims that a digital computer needs solely the right program to win the Imitation Game.

Turing raises and addresses a number of objections against his thesis, of which the Argument from Consciousness is one of the most important. Proponents of the Argument from Consciousness claim that the Imitation Game is insufficient in determining if a computer can think because it does not allow us to know if the computer is conscious. Turing replies by saying that those in favor of this argument should accept his test as this line of thinking results in the inability to determine if we can know if anyone or anything else has a mind or can think.

In order to strengthen his rebuttal against the Argument of Consciousness, Turing should have answered the following question: If a digital computer passes the Turing Test, is it necessary for the computer to have consciousness to be considered a thinking machine? Those in favor of the Argument of Consciousness claim that it is necessary and the Turing Test does not demonstrate it to be the case. They would like some evidence of the digital computer’s consciousness. If it can determined that the computer is not conscious, they will not consider it a thinking machine. In his reply to the critique, Turing also should have explained either how consciousness is irrelevant to a computer’s ability to think, the Turing Test checks for something more fundamental to the mind and thinking than consciousness so any attempts to determine consciousness would yield no further information, or the Turing Test somehow accounts for consciousness.

Additionally, in order to answer this question, Turing should address claims such as the one Searle makes in “Minds, Brains, and Programs” that while a digital computer may be able to pass the Turing Test, it is not a mind because it does not have understanding or consciousness. In other words, the computer may be able to trick the interrogator, but the computer doesn’t even know that its goal is to do so or even that it is playing the Imitation Game because it is merely running the conversation program.

It is also questionable whether or not the Turing Test is the appropriate test for determining if a machine like a digital computer can think. One could claim that it takes a mind to know a mind, as in the Turing Test, the interrogator, who we may assume has a mind, is evaluating the minds of its interviewees. Perhaps, the interrogator should be a computer instead of a human. The interrogator computer would try to identify the computer and the human, and if it is able to make the distinction, then it can be considered a thinking machine.