

The *Turing Test* (**TT**) is used to test whether computers have mentality. The set up of the test is as follows: there are 3 subjects involved. All three subjects are accessible to each other via a chat program and nothing else. The first subject is a real person, a human being. The second subject is a computer. The third subject is an interrogator whose job it is to determine which of the other two subjects is a human and which a machine. A computer has mentality if it is able to ‘trick’ the third subject into thinking that it is a human. The idea here is that to pass the **TT**, the computer just has to fool the person at the other end of the conversation that it is human.

The **TT** can be interpreted in two distinct ways: (1) that it is a *necessary condition* for mentality; or (2) that it is a *sufficient condition* for mentality. The claim that passing the **TT** is a *necessary condition* to mentality means that *if something has mentality (M), then it passes the Turing Test (TT)*. That is, for all x, if x has mentality, then x passes the **TT**. As an analogy, consider how being unmarried is a necessary condition for being a bachelor. This means that if someone is a bachelor, they are unmarried. It is then impossible for someone to be a bachelor and married. Similarly, if the ability to pass **TT** is a necessary condition for mentality, it is impossible for something to have mentality and not have the ability to pass the **TT**.

To prove that passing the **TT** is not a necessary condition for mentality, we must prove that there exists some x such that x has mentality *and* x does not pass the **TT**. There are many examples. For instance, suppose that one of the subjects involved in the test had *Obsessive Compulsive Disorder (OCD)*. Call him Pip. Pip feels the need to repeat whatever was said several times, and as such, he ends up repeating something that was said earlier in the conversation with the interrogator. Because of this, the interrogator thinks that she is conversing with a machine and Pip fails the **TT**. Pip has mentality but does not pass the **TT**. Thus, passing the test is not a necessary condition for mentality.

The claim that passing the **TT** is a *sufficient condition* for mentality means that if something passes the **TT**, then it has mentality. In other words, for all x, if x passes the **TT**, then x has mentality. As an analogy, consider the claim that playing basketball is a

sufficient condition for being an athlete. This means that anyone who is a basketball player is immediately an athlete. They don't need to do anything else to be an athlete. However, this does not mean that being a basketball player is the only way to be an athlete. Being a hockey player is a different sufficient condition for being an athlete. So if passing the **TT** is a sufficient condition for mentality, passing the test is enough for mentality, but this does not mean that passing the test is a requirement for mentality.

To prove that passing the **TT** is not sufficient for mentality we must prove that there exists some x such that x passes the **TT** and does not have mentality. An example of such a situation is the *Chinese Room* formulated by John Searle. In the room, there is a person, Searle, who receives Chinese characters through an "in-slot" from an actual person, Jean, who understands Chinese. Searle *does not know* what the characters represent. He consults a rule book that dictates what specific symbols he should push through the 'out-slot' upon receiving a specific symbol from the 'in-slot'. After pushing various characters into the 'in-slot' and getting the correct response from the 'out-slot', Jean is convinced that he is talking to another person who understands Chinese. But we just noted that Searle does not know any Chinese. Now suppose Searle were replaced with a computer. The computer takes the symbols it receives as inputs, and, consulting a rule book (its programming code), it gives an appropriate output. Doing so, it convinces Jean that it understands Chinese. But since Searle does not understand Chinese, we have no reason to think the computer does either. Thus, this computer passes the **TT** but does not have mentality. Hence, passing the **TT** is not a sufficient condition for mentality.