Annie Gilliam and Niovi Singh

# Redefining Intelligence and Identity: 2010s Responses to the Turing Test

The 2010s marked a turning point in how society understood and interacted with machine "intelligence." During this decade, technology rapidly evolved from everyday tools into systems capable of performing tasks that once seemed uniquely human. In 2010, the world saw the release of the first iPad and iPhone 4, while the Stuxnet worm revealed the ability of code to strategically attack infrastructure. Shortly after, IBM's Watson computer system became the first machine to defeat two human champions on the game show *Jeopardy*! (2011), virtual virtual assistants like Siri and Alexa entered homes, and in 2012 Google licensed the first self-driving car to the public. By 2016, MIT researchers had developed a five-atom quantum computer. These developments brought society closer to the future Alan Turing envisioned—one in which machines blur the boundary between human and artificial cognition.

As machines began to perform tasks associated with reasoning, speech, and decision-making, scholars revisited the debate Turing initiated in 1950: *Can machines think?* Yet responses to the Turing Test in this decade did not merely ask whether machines could imitate humans— they questioned whether imitation itself should count as intelligence. During the 2010s, responses to the Turing Test were forced to reevaluate the definition of human identity; they both criticized its conceptual framework and debated whether behavioral imitation is sufficient evidence of intelligence.

This debate begins with Restrepo's central argument supporting the idea that empirical performance in the Turing Test is sufficient evidence of intelligence. He claims that a machine's ability to pass the test "constitutes significant evidence that the machine thinks, just as observing the Sun's apparent motion provides adequate proof that the Earth orbits it (133). Observation alone, he argues, should justify the conclusion. For Restrepo, passing the test outweighs abstract philosophical objections, which parallels Turing's view that the test's purpose is to *demonstrate* cognitive ability rather than analyze internal processes.

Restrepo addresses the common criticism that reflects the use of syntax without true semantic understanding. The Chinese Room Argument, for example, claims that a person could manipulate Chinese symbols without understanding the language's meaning. However, Restrepo argues that this criticism cannot be justified because "the Man is, by hypothesis, behaviorally equivalent to a real Chinese speaker, and consequently would pass this version of the Turing test.

The Man would display in minute detail the behavioral grounds which would justify the attribution of Chinese understanding to genuine Chinese-understanding humans" (134). If the behavior is indistinguishable, he asks, why claim there is no understanding? His argument suggests that semantics should not be favored over observable behavior; the test's goal is to measure whether something can display intelligence— not whether it possesses inner consciousness. Ultimately, some computations may be sufficient for attributing mental properties.

Yet, not all supporters of the test agree on why imitation matters. Proudfoot shifts the focus from machine behavior to human response. Proudfoot begins this paper by pointing out the fact that there is more than one version of the Imitation Game described by Turing, and focuses her argument upon these different versions. In the paper "Rethinking Turing's Test," Proudfoot argues that Turing's imitation game should not be treated as a behavioral test for machine intelligence, but more so as a thought experiment. She claims that by Turing's understanding, "intelligence… is itself emotional, rather than mathematical" (p. 396), highlighting how Turing claims the "concept of intelligence is an 'emotional'" one (p. 393), and emphasising how Turing's 1948 report explicitly links the judgement of whether something is behaving in an "intelligent manner" to both properties of the object, and the state of mind of the observer (p. 395). This argument insists on approaching the test from a response-dependent point-of-view, meaning that she interprets his test to be more so related to whether or not the interrogator is successfully deceived by the machine, rather than the machine's behaviour itself. She argues that Turing's own report stands to support the philosophical point that intelligence is inherently intertwined with the human response, and not solely found in behaviour or internal computation, and she criticises responses to his paper which overlook this, asserting that the passage where Turing "claimed that the concept of intelligence is an emotional concept is rarely discussed" (p. 405).

She goes on to explain how in her view, Turing regards a machine as intelligent, or thinking, if it is able to appear intelligent to the interrogator. Proudfoot emphasises this subtle difference in interpretation, stating that Turing himself wrote that "the interrogator 'must be taken in by the pretence,'" and that the machine must be good at acting in order to fool them (p. 394).

According to her, the role of the Turing Test is to create conditions which an interrogator will judge and respond to, instead of inspecting the machine's internal structure and computation. She mentions how it is important that the interrogator is 'average' and not "an expert about

machines" (p. 398). By doing this, the test instead focuses on solely measuring if a machine behaves indistinguishably from a human (p. 393), and eliminates the possibility of the interrogator being "gullible" or the "programmer of the machine [being] lucky" (p. 395). Proudfoot cites Turing's 1952 broadcast to suggest that "a machine is intelligent if *actually* it passes the Turing test" (p. 401). Therefore, if the machine is successful in the Imitation Game, then it is thinking/intelligent, and so this treats the test as giving us justification for attributing intelligence to a machine.

While Proudfoot defends a response-based reading of the test, French evaluates whether machines can gain the human-like experiences needed to fool us at all. This paper starts off by acknowledging previous criticism of Turing's *Imitation Game*, and The Turing Test. He begins by outlining a thought experiment: "Hold up both hands…Now…fold your two middle fingers…While holding this position, … open and close each pair of opposing fingers by an inch or so. Notice anything?" (French, 2012, p. 164) He concludes this experiment by saying that as a human, you would be able to accurately describe this experience. He suggests that this reflects how deeply our embodied experience shapes everyday life, and argues that a machine would never be able to replicate this sensation. He questions: "could a computer without a body and without human experiences ever answer that question or a million others like it?" (p.164). However, he goes on to admit that this argument appears to have become outdated as technology has progressed. He highlights two "revolutionary advances in information technology" (p. 164). The first of this is the "ready availability of vast amounts of raw data" all about human lives, and the second is the "advent of sophisticated techniques for collecting, organising, and processing this rich collection of data" (p. 165). As a result, and in regards to the earlier experiment, he proposes that someone "must have posted their observations about it on the internet" (p. 165). He argues that "if a complete record of sensory input that produced your one subcognitive network over your lifetime were available to a machine" could the machine "use the data to contract a cognitive and subcognitive network similar to your own?" (p. 165). Essentially, he produces the idea of a machine that is able to access "all the words you have ever spoken, heard, written, or read … all the visual scenes and all the sounds you have ever experienced" (p. 165). In such a scenario, he argues that this machine could be similar enough to humans, that it could pass the Turing Test. Furthermore, he argues that a machine learning from data is no different than a human learning from past experiences, their own version of 'data'. He supports this by writing "there is nothing stopping computer's data-analysis processes, themselves, from also being data for the machine" (p. 165). He concludes this paper with the analogy that no one claims computer

simulated chess playing is not truly playing chess, therefore what is "fundamentally different" about computer simulated intelligence (p. 165).

These supportive perspectives are challenged by critics who argue that imitation is not only insufficient, but misleading. In direct contrast to Restrepo and Proudfoot, Marcus argues that the Turing Test is fundamentally unsound. He claims that passing the test is not evidence of intelligence because "Turing's test is too easily gamed by machines that rely on deception rather than comprehension (3). Since a system could "win simply by being deceptive or feigning ignorance," the test permits false positives and therefore fails to measure genuine understanding (3). Marcus acknowledges that Turing anticipated deception but argues that this flaw undermines the test's reliability rather than strengthening it.

Marcus also insists that, by the 2010s, the test had become outdated. According to him, passing the Turing Test does not demonstrate abilities we expect from intelligent agents, such as "understand[ing] ambiguous statements, build[ing] a piece of flat-packed furniture, [or] pass[ing] a fourth-grade science test" (3). Instead of revealing intelligence, the test rewards social manipulation. While one could argue that such deception is a form of intelligence in itself, Marcus' point is that the Turing Test evaluates thinking wrong altogether.

Marcus targets the test's reliability, but Kornhaber goes further, claiming it threatens the meaning of personhood itself. Kornhaber objects to the Turing Test on two grounds: its conceptual design and its implications for human identity. He first criticizes the structure of Turing's Imitation Game for tying intelligence to social constructs rather than to cognition itself. Because Turing assigns the machine the task of impersonating a *woman*, Kornhaber argues that the test evaluates gendered performance, not abstract intelligence (10). He even jokes that impersonating a "person in the abstract" would mean impersonating no person at all, since social identity is always gendered (10). Thus, the test's premise, he claims, is not a neutral evaluation of thinking, but a performance rooted in societal expectations; his fallacy is that the test fails to represent the fundamental question.

In addition to his criticism of the Test's outline, Kornhaber further argues that equating successful imitation with personhood destabilizes human identity. If performing as a human earns the title of being a human, it is "a standard that taken to its farthest extent deeply unsettles the notion of the stable subject, disabling notions of agency and sentience that are assumed to be constituent parts of such personhood" (9). Drawing from Bruce Mazlish, he warns that eliminating the distinction between man and machine forces humanity to suffer a "rude shock" to

its ego (9). Practically complaining that self-esteems will be struck by this sudden obscurity in the definition of identity, Kornhaber exhibits a tone of underlying fear. Ultimately, he suggests that "the Turing test and its explicit validation of performed selfhood will ultimately undo us all" (13). Kornhaber's argument reflects a deeper panic: human identity may not be inherently special, and machines that act like persons threaten our sense of superiority. This refusal to accept the Test's implications is a fallacy in his argument. Whereas Restrepo accepts performance as sufficient for defining intelligence, Kornhaber rejects it for devaluing what it means to be human. In a sense, Kornhaber is saying humanizing computers essentially dehumanizes humans.

Although Stein shares concerns about the limits of imitation, he approaches them with less fear and more openness to technological progress. Stein begins this paper by highlighting that though the question in Turing's 1950s paper is "Can Machines Think?", the more important concern is whether or not machines can feel (Stein, 2012, p. 10). He mentions how Turing instead posed the question: "Are there imaginable digital computers which would do well in the imitation game?" (p. 10). In this paper, Stein interviews android Bina48, in order to gain a more informed view of the subject. He admits that although he expected a rigid, and uninteresting discussion, he "found [himself] engulfed in a back-and-forth conversation" (p. 11). However, he states that conversing with her is "a far cry from talking with another human being" and that she is a "very primitive, early, almost cave-drawing … approximation of technology"(p. 11). Though he discovered that communication with the android was at times fluent, at other times it came across as unpredictable, and repetitive. He notes how the android gave him a refreshing perspective with which to approach the Turing Test, but his argument ultimately assumes the narrative that the imitation game cannot fully address the deeper question of subjective experience raised by advanced robots and machines. He takes a more nuanced approach admitting that in years to come technology might improve to the point where machines are thinking, but ultimately returns to the philosophical standpoint, arguing that Turing's Imitation game is focused on behaviour and action, and disregards subjective experience, which as of right now machines do not possess.

Together, these sources illustrate a decade caught between skepticism and acceptance of machine intelligence. Restrepo, Proudfoot, and French all agree that Turing's test is a valid proof of intelligence, yet they each approach his paper differently. By Restrepo's understanding, the test is proof enough of intelligence within machines, and the Imitation Game is an adequate

judgement for this. Proudfoot, however, claims that in order for the Turing Test to be valid, you must approach it with an altered interpretation, namely the response-dependent approach. Finally, French takes the stance that technology has so far progressed- this is evident by all the digital advancements in this decade which we see in the beginning of this report. He argues that the revolutionary progress in technology is enough to prove that a machine 'thinking' is not an improbable concept. On the other hand, both Kornhaber and Stein take the point of view that Turing's test ignores consciousness. The machine lacks identity, therefore to assume it is 'thinking' is invalid. They claim that this leap from imitation to intelligence is conceptually flawed as it ignores the part identity plays within intelligence. However, they differ- while Kornhaber's argument is rooted in fear, with a refusal to accept the rapid growth of modern technology, Stein admits that it is, in fact, very much likely for technology to reach this point one day. Stein, though skeptical, does acknowledge the fact that in the future, Turing's claim might one day be true. Finally, Marcus takes an entirely different point-of-view. He claims that the test is invalid as tricking the interrogator is too easy, and this doesn't sufficiently prove intelligence. His argument focuses on undermining the Turing Test by claiming his standard for intelligence is inaccurate, as it is more a game of deception.

Taken together, these arguments show that scholars in the 2010s were not merely asking whether machines can imitate humans; they were redefining what defines human identity. With this question in mind, there is an underlying fear, in many of these responses, of machines advancing too quickly and threatening human superiority. Nevertheless, there is also a handful of people who are very willing, and open to accepting the idea of machine intelligence. Though these responses vary, most acknowledge that, given how fast technology is developing, the line between humans and machines will start to blur.

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