

Love and Self

by Arden Chew

Alan Turing's relationship with his mailman had always been polite. The mailman was kind, which Alan appreciated, and the mailman was quiet, which Alan appreciated most. They had never exchanged more than a handful of words, the standard "Good Morning" usually sufficed. This was the way things had always been, and the way they continued to be, yet for the past few months Alan had come to dread the weekly encounter. With his courteous smile, the mailman now brought with him stacks of letters addressed to Mr. Alan Turing. Each envelope was filled with a personal criticism of Alan's recently published paper *Computing Machinery and Intelligence*.

Upon arrival, most of these letters would quickly find their way into the trash pile, a cluttered corner of Alan's Manchester residence where a trash bin now hid under mounds of similar letters, seals all still intact. The only surviving letters to make their way to Alan's desk came from friends and family and, for the most part, were free of personal attacks and criticism.

Of course, Alan had read a number of the critical letters in the first few weeks following his publication. He had forced his eyes through words of harsh judgement and plain opposition, searching for valid critiques with as open a mind as he could keep. Alan understood the importance of peer review having reviewed many journal articles himself. Only when he could predict the entire content of a letter by the opening sentence did the unopened letters begin to pile. Alan had come to find that each letter contained some subset of the same nine objections to the idea that a machine might be able to think.

"A computational machine cannot make a mistake," one letter, like many others, refuted. This particular response was not a challenge to the possibility for machine intelligence; surely making a mistake is not a necessary qualifier for intelligence. Rather it was a challenge of Alan's test for machine intelligence. Alan endearingly called his test *The Imitation Game*. The game is played with three subjects: a human evaluator, a human testee, and an intelligent machine testee. The evaluator, who is unable to see either testee and can communicate with them only via typed notes, attempts to distinguish which is the human and which is the machine. Both the human and machine testee attempt to convince the evaluator that they indeed are human, and inability for the evaluator to distinguish affirms that the machine is intelligent.

Although the game had never formally been played, Alan often enjoyed imagining how it might progress. Lonely hours in his study became thought provoking theoretical conversations between man and machine. The company Alan provided for himself was of the highest caliber.

Stimulating debate and challenging questions within his own mind far outweighed the vast majority of his interactions with others. Alan preferred not to assume the role of any one particular subject in these thought experiments, but rather to play as all three. Could a more intelligent trio play the game? Alan was uncertain.

It was easy to prove that an intelligent machine could make a mistake. Perhaps not a true mistake, but at least something resembling a mistake.

“Calculate the product of two-hundred fourteen and thirteen-thousand ninety-seven,” an observer might ask.

The answers “2802768” and “2003758” are returned to the imaginary observer. After scribbling down his own computation, the observer was surprised to find both answers to be erroneous. Alan had imagined a machine set to randomly make computational errors at a rate similar to the averagely intelligent human. Consequently, the observer’s question and the subsequent answers provided little insight as to who the machine might be. In this iteration of *The Imitation Game* Alan’s machine had stumped the observer once more, this time proving machines to be capable of portraying computational mistakes.

Alan paused. He had only proven machines to be capable of computational mistakes, but from his own experience Alan knew humans were capable of much greater mistakes. “To err is human,” the great English poet Alexander Pope once declared. Now sitting upright in his worn desk chair, Alan explored a moment of self-reflection. What were the mistakes that made him human? “As I am not hetero, is my sexuality a mistake? Am I a mistake?” These were not easy questions for Alan to ask of himself, but ones that he asked often. Topics of love and sexuality were necessary for Alan to consider in *The Imitation Game* despite the painful memories they imposed.

“Have you ever been in love? And if so, with whom?” the observer residing in Alan’s imagination asked.

Whom. Alan found himself in a unique place of power. Love is a foundational human experience; to provide humanlike qualities to a machine would require encoding love, but in doing so Alan would have to dictate how the machine loves, and who the machine loves. If he were to encode the machine to love atypically surely this would not be considered a mistake, not by Alan’s volition nor by the machine’s. Alan couldn’t help but ponder his own predicament. “Am I a mistake,” he asked once more. Behind the pains of social stigmas and denial, Alan recalled his own homosexual relationships fondly. Christopher Morcom, his late

boyhood sweetheart, had given him purpose. Christopher empowered Alan to love and to hurt, to feel and be felt. Alan knew with a certainty that his love for Christopher was not a mistake, but he failed to comprehend his innate tendency to hide the way he felt from others.

“Have you ever been in love? And if so, with whom?” Alan returned to the question at hand.

You. For the machine to recognize if it has ever been in love, it first must have an understanding of self. The observer’s question was more loaded than Alan first recognized, puzzling as it was indeed Alan asking the question in the first place. He mused at the idea of self. The fundamental requirement for perception of self is original thought. Many of the letters Alan received echoed this concern; “could machines be conscious, self-aware, and capable of original thought?” Alan looked over to the pile of unopened letters and chuckled quietly to himself. With such repetitive concerns, it seemed as though many of his writers lacked original thought as well. Perhaps they did not meet the same standards of intelligence to which they held Alan’s machines.

Alan sometimes genuinely doubted anyone’s ability for original thought, including his own. Of all his papers written, theories proposed, and machines built he could point to the specific journals that led him to these innovations. Alan could also point to the specific person who supplied the motivation for his work, once more remembering Christopher. In the grieving years following Christopher’s death, Alan found purpose in unearthing the essential truth behind self. Each step closer to giving machines life brought Alan closer to comprehending his beloved Christopher’s life and passing. Christopher’s memory accompanied his every thought, and Alan was not convinced that any thought he had was entirely his own.

Whether his thoughts were truly original or not, Alan was unsure. He was sure, however, of his intelligence. “I do not wish to give the impression that I think there is no mystery about consciousness, but I do not think these mysteries necessarily need to be solved before we can answer the question of whether machines can think,” he wrote in response to an early critic.

Arriving back at the original questions of love and self, Alan considered the machine. He could assign his machine a way of loving, just as Alan deemed his sexuality had been chosen for him. He could provide books and journals from which the machine might derive original mathematical connections and ponderings, just as Alan had done since grade school. “To err is human,” but it would appear that the inherently human qualities of making mistakes and generating original thought were programmable after all. Could machines be as intelligent as humans? Yes, Alan was sure of it, but a new question made way to the front of his mind. What makes himself any different than a machine?