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Alan Turing III

Lead: After describing the modern programmable computer and helping break the German Enigma codes, British mathematician Alan Turing turned his attention to artificial intelligence.

Intro.: *A Moment in Time* with Dan Roberts.

Content: After the wartime emergency, Turing joined Britain's National Physical Laboratory. There he helped finalize plans for an Automatic Computing Machine (ACE), which followed his 1937 theory advocating a device that could

do many tasks depending on the information fed into it. Unfortunately, the National Lab was bogged down in bureaucratic inertia and, discouraged by the slow pace, Turing, in 1948, accepted a position at the University of Manchester.

In 1950 he produced a widely heralded paper “Computing Machinery and Intelligence,” in which he described computers that could think. He proposed to test artificial intelligence through a gaming exercise, still used, though today it’s called the Turing Test. It helped determine if computers could compete with human intelligence.

Yet despite his professional success, Turing's personal life had hit a rough patch. He had made no secret of his homosexuality and in the early 1950s had an affair with a street person named Arnold Murray. One of Murray's friends robbed Turing's house and in the course of the investigation, the police learned of Turing's relationship with Murray. The famous scientist was charged with felonious "gross indecency." To avoid jail time he was forced to take large injections of the female hormone estrogen to suppress his "unnatural lusts." Depression began to grip him and in 1954 Turing committed suicide by eating an apple laced with potassium cyanide. Brilliant, eccentric, willing to think

outside conventional patterns, Alan Turing made lasting and unique contributions to mathematics, the defeat of Germany, and the development of the modern computer.

Research assistance by Susan Higgins, at the University of Richmond, this is Dan Roberts.

Resources

Hodges, Andrew. *Alan Turing, The Enigma.* New York, NY: Simon and Schuster, 1983.

Slater, Robert. *Portraits in Silicon.* Cambridge, MA: MIT Press, 1987.

Turing, Alan. “On Computable Numbers, with an Application to Entscheidungs Problem,” *Proceedings of the London Mathematical Society* 42 (1937): 230-265.

Turing, Alan, “Computing Machinery and Intelligence,” *Mind* 59 (1950): 433-460.

Turing, Sara. *Alan M. Turing.* London, UK: Heffers, 1959.

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