

Some More Assessments

People rank Einstein as the genius of recent civilization because he was an inspiring and lucid thinker, not because he brought us revolutionary developments. Einstein and Genius have become synonymous, but unfortunately, many groundbreaking thinkers have gone underappreciated. For example, I consider Alan Turing to be one of the greatest geniuses of the 20th century, having given us some crucial insights into computational science, which has arguably brought more change to our society than all of general relativity and quantum mechanics combined.

June 1912: Alan M. Turing was born in London. He died in 1954, not long before his 42nd birthday. Turing is widely considered to be one of the greatest intellects of the twentieth century. He established the basis for modern computers and originated what is now called the "Turing machine," a mathematical model of an all-purpose computer. Much of his thinking about computing anticipated problems that became important later on; one example is the well known "Turing test" that bears his name. He played a decisive role in helping the British to break German codes during World War II and for this work he received an O.B.E. After the war, Turing continued to work in computing and codes, and his interests expanded to include pattern formation and morphogenesis. He had all his life been openly homosexual, and in 1952 he was arrested and found guilty of homosexuality. Because of his work on code-breaking, he had high-level clearance, but this was withdrawn after his conviction. In June 1954, he was found dead of cyanide poisoning. The poison was in an apple he had been eating. The definitive work about Alan Turing is the compelling and highly readable *Alan Turing: The Enigma* by Andrew Hodges (1983). Hodges has created an extensive web site about Turing's life and work.