The book is about a fictional dinner party given by C.P. Snow at a Cambridge college. Oxbridge dinners tend to be sumptuous affairs and consist of many courses. In Casti’s account, only the “savory” and the port are missing. The guests Haldane, Schrödinger, Wittgenstein, and Turing gather to debate the question: can a machine think like a human being? The issue being discussed was fresh in 1949 and is still the subject of lively controversy today, as is the related question: is the human mind a computer? Today we find e.g. Minsky and Pinker on one side of the question and Searle and Penrose on the other, while in the book under review Turing is pitted against Wittgenstein, with Schrödinger, Haldane and Snow contributing their expert opinions to the discussion. Of course, today’s television audiences and science fiction fans accept the intelligence and personhood of machines without a second thought.

When asked to review this book, I first had some misgivings, fearing that historical fiction produces misleading pictures of the past, which one’s memory
later translates into pseudo-facts. Indeed, I spotted some anachronisms in this tale (the fictional Wittgenstein must have read Searle and the other discussants are familiar with the ideas of Chomsky), though in a postscript Casti confesses that this deceit was deliberate. I was reminded of Umberto Eco putting one of Wittgenstein’s aphorisms into the mouth of a medieval monk.

Although I am old enough to have known the five protagonists, I never met any of them face-to-face. I am fairly familiar with the biographies and ideas of Turing, Schrödinger and the early Wittgenstein, and I recall having read a novel by Snow, but must confess that I cannot tell Haldane from the biologist Huxley. I once had a conversation with the intuitionist Brouwer, who challenged me to show him any contributions to mathematics by Wittgenstein. I could only think of truth-tables, forbidden territory to Brouwer, but these had been anticipated by the Stoic philosophers. I only learned quite recently from Phil Scott that Wittgenstein in his Tractatus had also invented what are now called the Church numerals, according to which e.g. the number 2 is seen as the process of iterating functions. However, the Wittgenstein of Snow’s party is the later Wittgenstein, who had renounced the earlier views expressed in the Tractatus, which might have made him more sympathetic to computer science and the claims of artificial intelligence.

During the meat course, Turing summarizes Wittgenstein’s argument, mimicking Searle:

- **Axiom 1**: Programs are purely syntactic objects.
- **Axiom 2**: Human minds have semantic content.
- **Axiom 3**: No amount of syntax can generate semantics.
- **Conclusion**: Programs are neither necessary nor sufficient for mind.

I don’t know whether to blame the fictional Turing or Wittgenstein or the real Casti or Searle for this non sequitur. But, if one accepts Axiom 3, how can one expect a purely syntactic argument like this (assuming it has been fixed up to conform to the rules of logic) to have scientific consequences in the real world? In the book, the argument is demolished by Schrödinger, who points out that, if different words are substituted for “programs”, “syntactic”, etc., one can disprove Maxwell’s theory that light is an electro-magnetic phenomenon.

In spite of my nitpicking, I recommend this fascinating tale of how five of the leading intellects of the first half of the twentieth century might have debated the exciting philosophical topic of machine intelligence.