

6.803/6.833 The Human Intelligence Enterprise
Prof. Patrick H. Winston
Assignment: Paper Decoding

Paper

Turing, A. M. "[Computing Machinery and Intelligence.](#)" *Mind* 49: 433-460 (1950).

WRT: 1.5 hours

Assignment

You are to limit your response to the questions posed in this assignment to one side of one sheet of paper, using 10 pt type or larger, with reasonable interline spacing and margins.

Note that there are two reasons we insist on the one-page limit.

- We want you to learn to be concise.
- We scan your papers before annotation for distribution and after annotation for posterity. Our scanner does not handle staples, nor does it handle two sides.

Before you start writing, read the Style Guide carefully. We are very picky about the points listed, so you should review every paper you write to be sure that you have adhered to the commandments. Otherwise, you will drive us crazy with rage.

Part I—Preparation

Read the [6xxx style guide](#) carefully. See the study materials section.

Part II—Decoding a Paper

Imagine that you have partied all weekend. 6.xxx is to meet in fifteen minutes, and you have not read the assigned paper yet. You are afraid Winston will call on you at random to summarize the important ideas. Explain how you would use your fifteen minutes to prepare for that possibility. Do not limit yourself to techniques suggested by the Turing paper.

Part III—The Turing Paper

Note: Turing's paper was originally published in 1950.

- What question is Turing attempting to answer in his paper? How does he transform the question? Why?
- What is Turing's answer to his question? What is his prediction regarding the creation of intelligent machines? Was his prediction accurate? Why or why not?
- What presumptions does Turing make with respect to the importance of our learning, visual, linguistic, and motor capabilities? Do his presumptions reflect his mathematical background?
- Turing provides various arguments against arguments against the possibility of machine intelligence. Which is the strongest? Which is the weakest?

Part IV—Go back over your paper

Check your paper carefully for style infringements as defined by the *Style Guide*, especially quote misuse. Do this as if such an infringement would expose you to public ridicule or an F in the subject.

Part V—Go back over your paper again

This time make absolutely sure you have not committed the quotation crime identified in the style guide.