

6.803/6.833 The Human Intelligence Enterprise  
Prof. Patrick H. Winston  
Assignment: Broken Glass Diagrams

## Paper

Minsky, Marvin. "Steps toward Artificial Intelligence." In [\*Computers and Thought\*](#). Cambridge, MA: MIT Press, 1995, pp. 406 – 450. ISBN: 0262560925.

WRT: 2.0 hours

This paper is a slog in parts, as Minsky is often telegraphic or vague or both in his explanations, because this is, after all, a survey of nascent ideas. Do not get bogged down in the occasional mathematics and obscure examples. Be sure to read the first few and the last few pages when you are fresh.

## Assignment

On a total of one side of one sheet of paper, using 10 pt type or larger, with standard interline spacing and margins, respond to all the following.

- Discuss similarities and differences in the views expressed by Turing and Minsky. Prepare to do this by imagining what it would be like to be Turing and what it would be like to be Minsky. Include remarks on how their research programs coincide and differ.
- Recall the blocks-world arch-learning program described in the right version of 6.034. Comment on the degree to which it is anticipated in Minsky's section on learning.
- Identify the strengths and weaknesses of Minsky's conclusion. Write your own conclusion, correcting the weaknesses. Suggest some general rules for writing conclusions.

On the other side of your sheet of paper:

- Construct a two-level broken-glass summary for Minsky's paper.

The point of this exercise is to demonstrate that constructing such a visual outline helps you to understand and remember what you read. We are interested in seeing the general structure you come up with; we are not interested in the fine detail.