CSCI 108: Essay 2

Due: Wednesday, November 19

Over the course of the semester, we have frequently discussed the need in AI systems for knowledge about the world. This knowledge can take many forms. In a medical expert system, for example, it might take the form of advanced medical knowledge. In the type of system described by Turing, it might take the form of common sense knowledge about the world. Brooks would argue that the correct starting point for devising intelligent systems is at a lower intellectual level.

Now consider, for instance, me, my pet bird, and my computer. I would argue that my pet bird is quite clever. She knows that the only way out of her cage is through one of the doors. She can't open them (thank goodness!) but she tries hard. In general, the loud clanging sound made by her escape attempts gets our attention and we take her out. It appears that she has formulated a goal and has devised a plan to achieve it. Yet I assume that if one were to compare me and the bird, I would be be labelled more "intelligent". Now consider my computer. If one imagines the memory on my laptop to be analogous to my brain, then my laptop has a great deal of knowledge that I do not have. Again, though, I suspect I would win the "intelligence" prize if we were compared.

What is the relationship between "knowing things" and intelligence? Is it of relevance for judging progress in the field of Artificial Intelligence?

Your essay should be approximately 2-3 pages long, 12-point font, with 1-inch margins. You may, if you'd like, use class readings or outside readings as sources. (This is not a requirement, however.) Try to keep quotations from the readings to a minimum (say, 1 from each), but be sure to give references for all material that you derive from the readings.