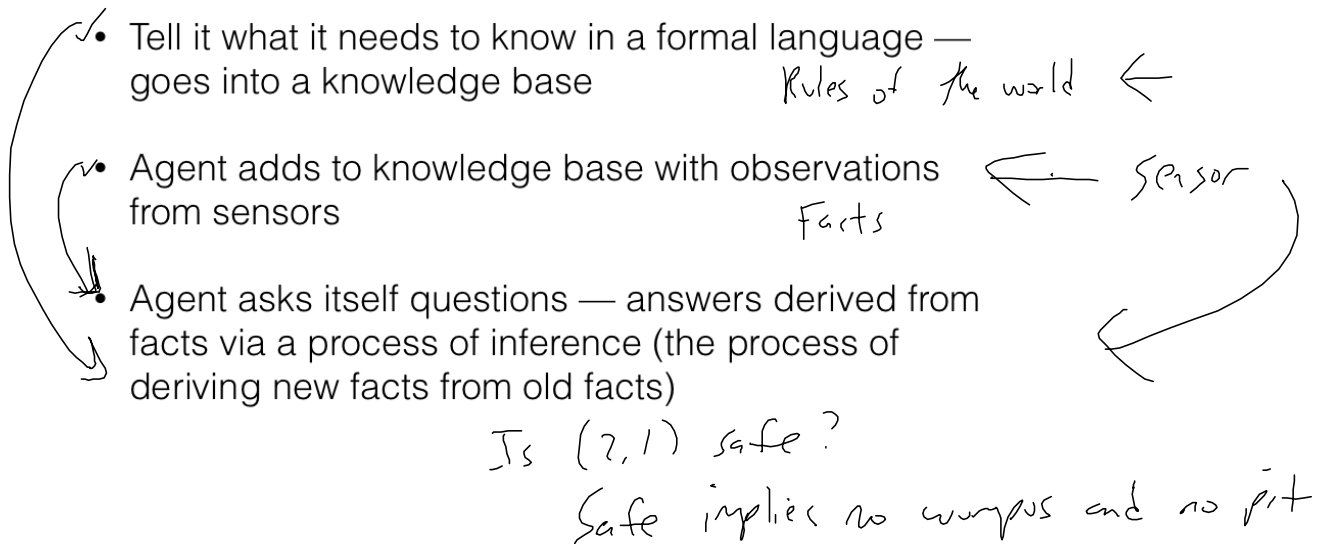## Logical agents
Wednesday, October 5, 2016   9:31 AM

- Logical agents can adapt to partially-observable domains because they can infer things about aspects of the world that are unobserved

- How a logical agent works:

  - Tell it what it needs to know in a formal language — goes into a knowledge base   *Rules of the world* ←

  - Agent adds to knowledge base with observations from sensors   ← *Sensor*

    Facts

  - Agent asks itself questions — answers derived from facts via a process of inference (the process of deriving new facts from old facts)

    Is (2,1) safe?

    Safe implies no wumpus and no pit

- **Knowledge base:**

  - Comprised of facts about the world, how the world works, and how to change the world

  - Sentences that are logically evaluated to true or false

  - Sentences must be represented in some some knowledge representation language

- **Things we need:**

  1. How to represent facts/sentences

  2. What facts to give agent? (Knowledge engineering)

  3. How to reason about facts? (How to do inference such that conclusions agent draws are guaranteed to be correct)