## Arif Ahmed on Newcomb's Paradox

- 1. Define *two* of the following terms in your own words. Use examples where helpful:
  - a. Stochastic Independence
  - b. Causal Independence
  - c. (Horizontal) Dominance
- 2. In Newcomb's problem, reasoning in terms of the agent's expectation about the outcome of various actions supports One-Boxing, while reasoning in terms of dominance supports Two-Boxing. In §2, Ahmed discusses more realistic scenarios in which these different argument strategies produce conflicting results.
  - a. Draw up an outcome table with two rows (actions) and two columns (world states) to represent the *Fisher Smoking* case as discussed by Ahmed.
  - b. Explain, in your own words, why reasoning in terms of dominance supports *Smoking* in this case.
  - c. Explain why reasoning in terms of the agent's expectations supports *Not smoking*.
  - d. What do you think the right answer is in this case? [ *If you like, you can give a reason for your answer here, but you don't have to.* ]