

# Lecture 8

## Part Two

### Objections to Symbol Systems

# Plan

- Searle's 'Chinese Room' Objection
- Block's 'Population of China' Objection
- Argument from the 'Fluidity of Everyday Coping'
- Microfunctionalism
- Preview of the next two weeks

# The Chinese Room

- There is a person in a room who only speaks English
- Papers come in through a mail slot and they have marks on them
- The person has a book that tells them that if there are certain marks they are to write down certain other marks
- The person then posts the result back through the mail slot

# The Chinese Room

- The papers that come in have questions that are written in Chinese
- The book is a translation manual of the that provides answers in Chinese to questions in Chinese
- The papers that go out have answers to the questions in Chinese

# The Chinese Room

- Does the person in the room understand Chinese?
  - The answer is supposed to be a resounding NO!!!!
- Similarly (the argument goes) a computer that manipulates symbols according to rules doesn't *understand* the content of the symbols / meanings

# The Chinese Room

- One Response:
- The relevant analogy isn't between the person in the room and a symbol manipulating computer
- The relevant analogy is between the person + translation manual and a symbol manipulating computer
- While the *person* might not understand Chinese, the person + translation manual do

# The Population of China

- Take the population of china
- Get them to implement the functional profile of a mental state (e.g., belief that the sun is hot)
  - Give them letters or other formal symbols
  - Instruct them to pass the letters to each other according to certain rules
- Does the population of china exhibit the relevant mental state?

# The Population of China

- Once again the response is meant to be a resounding NO!!!
- If you have the intuition that they don't then you might well think that symbol manipulation isn't sufficient for mentality
- If you have the intuition that symbol manipulation is sufficient for mentality then you might be inclined to think that the population of China does exhibit mentality



# Fluidity of Everyday Coping

- What would AI do if it discovered a Martian in the kitchen?
  - Add more to the knowledge base
  - Add a more powerful inference engine to the knowledge base
  - Basically... More of the same

# Micro-functionalism

- Clarke says that we might be able to fix the ‘fine details’ of the internal state transitions such that they can’t be replicated by the population of China
  - Might lose multiple realizability if the details get too fine
  - Ad hoc?

# Next Time:

- Dennett (Intentional Stance)
  - Considering the nature of mental states once again
  - Do thermometers have beliefs about the temperature and desires for the temperature to be a certain way?
  - Focus on the predictive leverage we get from belief-desire ascriptions

# And Then:

- We will look at connectionist architectures (as opposed to symbol system architectures)
  - Connectionist networks are thought to be more similar to neurones than symbol system architectures
  - They are also thought to be more similar to our cognitive architecture than symbol system architectures