

# Intro to Symbolic AI

→ Thinking  $\times$  Humanly } M.O.  
Acting  $\times$  Rationally }

→ Acting Humanly covers:

- 1) NLP
- 2) Knowledge Representation
- 3) Automatic Reasoning
- 4) ML
- 5) Comp. Vision
- 6) Robotics

} Need ALL these to pass the Turing Test

(?) But SHOULD we replicate humans?

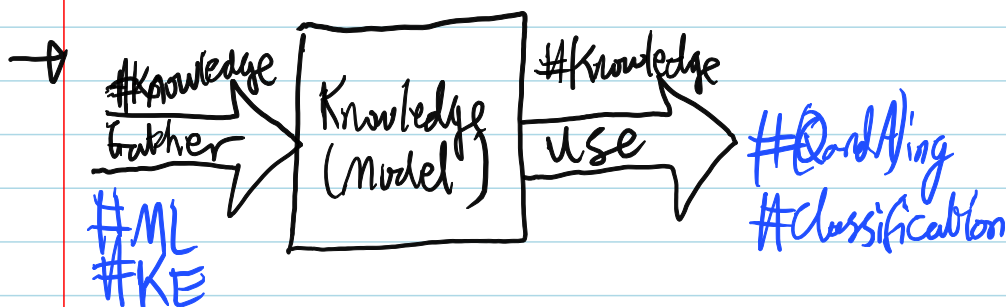
→ Thinking Humanly: spinmaker (artificial NN made from hardware)

→ Thinking Rationally

→  $\forall x, x = Z, G = x (\because G = Z)$

→ What is Symbolic AI?

Symbolic AI: natural acquisition + application of knowledge  
Symbols to represent the world



→ Knowledge rep'n = {Symbolic  $\cup$  Statistics}

inconsistency / uncertainty

→ Modelling = "How are things related?"