

# Defining Knowledge III: Tracking the Truth

# Tracking the Truth

- Reliabilism: One has knowledge if the process by which he/she acquired the given belief is reliable.
- Robert Nozick's theory is a kind of reliabilism.
- X knows that p if and only if:
  - (1) X believes that p
  - (2) p is true
  - (3) If p were not true, then X would not believe it.
  - (4) If p were true, then X would believe it.
- Conditions 3 and 4 replace the condition of justification with subjunctive conditionals.
- Aim: To eliminate accidental truth cases.

# Subjunctive/Counterfactual Conditionals

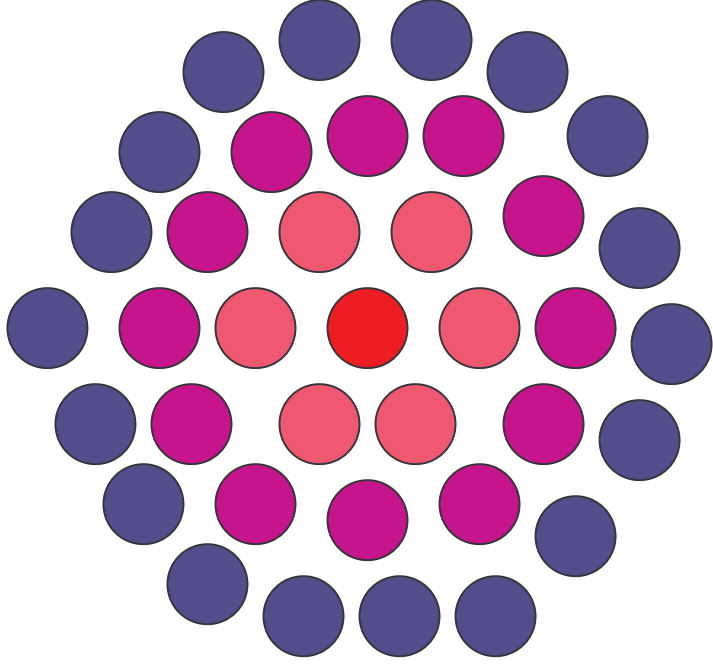
- The antecedent of such conditionals is false/unsatisfied.  
‘If Shakespeare hadn’t written Hamlet, someone else would have’  
‘If Oswald hadn’t killed Kennedy, someone else would have’
- Science makes many counterfactual claims

## Examples:

- (1) Had the initial conditions of the universe been slightly different, there would not be any life on earth.
  - (2) Were there no forces to act on a body, it would continue at rest or in uniform motion along a straight line.
- Questions: How are we to understand counterfactuals? What is their meaning? What are their truth-conditions?

# Possible World Semantics

- Truth conditions become relations between possible worlds.
- The counterfactual ‘if  $\phi$  were the case,  $\psi$  would be the case’ holds in the actual world *if and only if*  $\psi$  holds in all  $\phi$ -worlds which are closest to the actual world.



- The closer the world, the less different from the actual world.

Red: Actual world

Pink: Closest possible worlds

Violet: Further-away possible worlds

Blue: Furthest possible worlds

# Condition 3

- Nozick calls his view ‘truth tracking’ because our belief ‘tracks the truth’ or ‘is sensitive to the truth’ among close possible worlds.
  - Condition 3: If  $p$  were not true, then  $X$  would not believe  $p$ .
- In terms of Possible Worlds: ‘In close possible worlds where  $p$  is not true,  $X$  does not believe  $p$ ’.
- Tackling accidental cases
- Suppose your belief is true by accident. There will be a close possible world where you have that belief but that accident doesn’t happen ( $p$  is not true). The third condition is not satisfied, hence you don’t have knowledge.

# Example

- Henry and the fake barns revisited
  - (1) Henry believes that there is a real barn in this area.
  - (2) The proposition ‘There is a real barn in this area’ is true.
  - (3) In a close possible world where there is no real barn in this area, Henry would still form the belief that there is one.

But: The third condition says that if p were not true, X would NOT believe that p. Here X DOES believe that p!!

Verdict: Third condition not satisfied so Henry doesn’t know.

# Condition 4

- Condition 4: If  $p$  were true, then  $X$  would believe  $p$ .
- In terms of Possible Worlds: ‘In close possible worlds where  $p$  is true,  $X$  believes  $p$ ’.
- Tackling accidental cases  
Suppose having the belief is an accident. There will be a close possible world where  $p$  is true but that accident doesn’t happen and you don’t have that belief. The fourth condition is not satisfied, hence you don’t have knowledge.

# Example

- Brain in the vat stimulated to believe that (s)he is a brain in a vat
  - (1) Robert believes that he is a brain in a vat.
  - (2) The proposition ‘Robert is a brain in a vat’ is true.
  - (3) In a close possible world where Robert is not a brain in a vat, he would not believe that he is a brain in a vat (because he would not be fed this belief).
  - (4) In a close possible world where Robert is a brain in a vat *but is not fed this belief*, he would not believe that he is a brain in a vat.

But: The fourth condition says that if p were true, X would believe that p. Here he DOES NOT believe that p!!!

Verdict: Fourth condition not satisfied so Robert doesn’t know.



# The Sceptic

- The sceptic's argument rests on the closure principle, i.e. 'knowledge is closed under known logical implication'.
- The Closure Principle: If you know that p, and that p logically entails q, then according to the closure principle it follows that you know that q.
- The Sceptic's Use of the Closure Principle:
  1. I don't know I'm not a brain in a vat - premise
  2. I know that (if I'm in a lecture on earth, I am not a brain in a vat) - premise
  3. | I know I'm in a lecture on earth - assumption
  4. | I know I'm not a brain in a vat - closure 2, 3
  5. If I know I'm in a lecture on earth, I know I'm not a brain in a vat - CP 3-4
  6. I don't know I'm in a lecture on earth - modus tollens 1, 5

# Nozick' Reply to the Sceptic (1)

- Nozick: The closure principle is false. Whether an individual knows a proposition depends on the relevant possible worlds.
- I can know that  $p$ , and know that  $p$  entails that  $q$  without knowing that  $q$ .
- Conditions 3 and 4 are not closed under known logical implication.

# Nozick' Reply to the Sceptic (2)

## EXAMPLE (testing condition 3)

p = I am awake and delivering a lecture in Bristol

q = I am not floating in a tank in Alpha Centauri being stimulated by electrochemical means to believe that p

- I know that p

If p were false, (suppose I were in my office or at home in Bristol)  
i.e. If p were false, I would not believe that p.

- I know that p entails q

If p entails q were false, I would not believe that p entails q.

- I do not know that q

If q were false, (suppose I were floating in a tank in Alpha Cent.)  
i.e. If q were false, I would still believe q.

# Problems

- Secretary with twin sister
  - (1) Ioannis believes that his secretary is in his office.
  - (2) The proposition “Ioannis’ secretary is in his office” is true.
  - (3) If her twin sister (and not his secretary) were in his office, Ioannis would still believe his secretary is in his office.

Nozick: Third condition not satisfied so Ioannis doesn’t know.

Knowledge: YES

Intuition: It seems that I do know when I see my real secretary at her desk.

Reply: If it is not very likely for her twin sister to be in my office, then it is not a close possible world.

# Problems 2

- Jesse James
  - (1) X believes that the robber is Jesse James.
  - (2) The proposition “The robber is Jesse James” is true.
  - (3) If the robber were not Jesse James, X would not believe that that the robber is Jesse James.
  - (4) If the robber were Jesse James but the mask did not slip off, X would not believe that the robber is Jesse James.

Nozick: Fourth condition not satisfied so X doesn't know.

Knowledge: YES

Intuition: It seems that X does know that the robber is Jesse James.

# Food for Thought

- Can we make do without an epistemic closure principle?
- Is there a way to make precise the notion of close possible worlds?

# Reading

- R. Nozick ‘Knowledge and Skepticism’ in Kim and Sosa (eds.) *Epistemology: An Anthology*.