## Theory of Knowledge Class Notes 2019

# **By Nous Monkey**

# Email: nousmonkey@gmail.com

Truth and Belief Condition:

- 1. The truth condition is a credit deserving situation. One gets credit for getting things right, and one gets things right, most often, by finding the truth.
- 2. The Belief condition helps one in linking 'p' (which is true) to the person deserving the credit. Belief requires conscious states; inanimate objects cannot have knowledge.
- 3. Examples against 1. Now we know the earth is round, in the middle ages people knew it was flat. (People know something false) This example does not work because is loose talk. Now we know the earth is round, in the middle ages people thought they know the earth is flat.
- Examples against 2. I do not believe it; I know that the future president is a democrat. In this example, still lose talk, I "do not believe" is used to emphasize that is more than belief, that one has knowledge. I does not deny belief, it includes it as a part of knowledge.
- 5. Knowledge vs. merely getting it right.
  - a. True belief is not a sufficient condition for knowledge. This is so since one can have a true belief by accident. If one has such an idea by accident, one cannot be in a credit deserving situation. This is so because luck does not imply a success did by the agent. Also, a guess could have easily been otherwise.
  - b. Skilled archer—the skilled archer (S with justification) hits the target always, is due to S, while unskilled archer does not always hit, is not due to S.
- 7. Definition of knowledge in terms of conditions:
  - a. Kp->p/ Kp->Bp. Sufficient  $\rightarrow$  necessary. (p, Bp, Xp)  $\leftarrow$  >Kp (necessary and sufficient for knowledge  $\rightarrow$  Kp).
  - b. Responses to the failure of finding Xp, a. knowledge as primary, undefinable— Williamson knowledge-first epistemology; b. Wittgenstein states that there is no essence of knowledge, just family resemblances.
  - c. Is it necessary to know in detail about truth and belief before knowing about knowledge?

The Value of knowledge.

- 1. ceteris paribus=all things being equal, all conditions being equal.
- 2. What is the value of knowledge? What is the value of true belief? How is knowledge more valuable than true belief?
- 3. Ceteris paribus, true beliefs are more valuable than false beliefs. This so since true beliefs in themselves are valuable for attaining one's goals. Only when external factor play in, falsity becomes more important than truth.
- 4. Having true believes is valuable because our goals are valuable.
- 5. When ceteris paribus is no respected, cases. The singing contest case, the negative emotional impact of a truth makes falsity more valuable than truth. The grains of salt case, the beliefs are about different topics, the importance of the topic affect the importance of the truth.
- 6. Knowledge is more valuable than mere true belief because it is more stable. A mere true belief can easily be changed with a false belief but knowledge remain still.

Beyoncé and Meredith case. Meredith changes her true belief about the hour of the interview because she has no knowledge about it. (Bigger utility value for Beyonce, she has utility points both for when interviewer is late and not/ Less fragile for Beyonce, it is harder to form false beleifs)

7. Synchronic—Justification, Truth, Belief model of knowledge, Diacronic—Stability model of knowledge, S knows P if believing P is stable (later than time T) since it is being formed in a reliable manner (before T). Meno-stability, Theaetetus—justification.

The definition of knowledge.

- 1. Defining knowledge based on examples of it, is problematic because in selecting the examples one already has a definition of knowledge.
- 2. This is a vicious circle. This circle has two parts. a. you are able to identify instances of knowledge only if you are already know what the criteria for knowledge is. b. you can know what the criteria for knowledge are only if you are already able to identify instances of knowledge.
- 3. There are two options. Denying a. or b. Denying a. implies you are able to identify the instances of knowledge without having a criterion for knowledge. Denying b. implies one is able to know the criteria without needing to know instances of knowledge.
- 4. Methodism—denying b. One is able to know the criteria based on axioms. Advantage: skepticism is taken seriously (one is able to know the intension of knowledge without knowing if there is an extension). Disadvantage: achieving knowledge this way is difficult.
- 5. Particularism—denying a. One is able to recognize instances of knowledge without knowing the criterion (know it when you see it). Advantage: less extravagant than methodism, not so difficult as methodism. Disadvantage: the sceptic hypothesis is not taken seriously. (This is so since by stating the one just has the specific instances of knowledge one **assumes** that one can have knowledge. Knowledge should be proved not assumed)
- 6. The (im)plausibility of methodism. If the criterion for knowledge is obvious, then methodism is plausible. If the criterion for knowledge is very complicated, coming to success just through reflection is difficult—methodism is implausible. Methodism is implausible because after Gettier problems the criterion for knowledge becomes difficult to find.
- 7. Explaining Gettier cases. They are against JTB. Gettier cases show there is a mismatch between intuitions and JTB. The intuitions state that one does not have knowledge, while JTB states that one has. Gettier agrees that JTB is necessary condition but is not a sufficient condition for knowledge. E.g. The stopped clock case. The clock stopped exactly 24 hours ago. The JTB condition is satisfied, but intuitively one does not have knowledge based on stopped clocks (It is out of luck that the clock stopped exactly 24 hours ago)
- 8. Responses to Gettier cases.
  Gilbert Harman: S knowns that p if and only if:
  p is true
  S believes that p
  S is justified that p

S's belief is not based on false presuppositions.

 $- {\sf John's}$  belief that is 8.20 is based on the false presupposition that the clock is working.

-problems for 'no false lemmas: How do we separate a presupposition from a belief? If our characterization is too liberal, we have 'too little' knowledge.

If our characterization of presupposition is too narrow, we have 'too much' knowledge. — problems for 'no false lemmas: the sheep example, is not a presupposition, is just a perceptual information.

The structure of knowledge

- 1. Until now: focus on individual pieces of knowledge/beliefs. This chapter is focused on the **totality** of knowledge/belief. The collection of individual pieces of knowledge/beliefs has a certain **structure**.
- 2. By what are our beliefs (Leuven is in Belgium) justified? A. nothing at all. There is no epistemic difference between rational believes and irrational ones. B. another belief (the map shows that Leuven is in Belgium) what justifies the other belief? Each belief needs to be justified by a new belief if the original is to be justified—infinite regress. C. a web of beliefs that justify each. In this case, is not an infinite regress but a vicious circle. (we dropped the assumption that each belief needs to be justified by a new belief)
- 3. Agrippa's trilemma, what justifies our beliefs. The three unattractive options are: A, B and C. These three options seem to imply that we are **not justified** in holding our beliefs. If we have no justification, then our beliefs do **not** amount to **knowledge**.
- 4. Options A, B and C yield **three epistemological theories**: A-foundationalism, B-infinitism, C-coherentism.
- 5. Infinitism. Philosophically the least plausible, Historically the least popular. E.g. Peter Klein, Jeanne Peijnenburg.
- 6. Coherentism\*. Philosophically more plausible. Historically more popular. (the circle needs to be sufficiently large). Quine on the web of belief:

-all our beliefs are revisable in the light of new evidence.

—web of beliefs that all hang together: 'the sun is currently shining'—outside the web. (easy to revise in light of new evidence) 'logical principles ( $p v \sim p$ )—inside the web (most immune to revision, but in principle revisable)

- beliefs can be justified because they are part of a **coherent web of beliefs** (non-vicious circularity)
- what is **coherence**?

o minimal requirement: logical consistency

o more substantial criteria: 'rendering more plausible'

- in line with our actual practices of justifying our beliefs
   o e.g.in the Middle Ages, people were justified to believe that the Earth is flat,
   because that belief was part of a coherent web of beliefs (a coherent worldview)
- are these actual practices correct?
- 7. Foundationalism. Our beliefs can be justified without being justified by further belief. Philosophical the most plausible ? Historically the most popular. Foundational beliefs: justify other beliefs, they themselves do not require further justification (they are self-justifying). E.g. Descartes—Cogito Ergo Sum. Russel—the belief that there is currently a bright orange patch in the center of my visual field.

—The requirements should not be too lose-the child's belief that the moon is a balloon would be a foundational belief.

—The requirements should not be too strict: it is unclear who a small number of foundational beliefs is to justify the vast number of non-foundational beliefs. E.g. 'cogito ergo sum' or 'there is an orange in my visual field' cannot justify that 'Donald Trump is the president of the USA', 'Leuven is in Belgium'.

#### Rationality

- 1. Why should epistemologists care about rationality? Rationality is a necessary condition for knowledge. Rationality is interconnected with justification. A belief is justified if and only if it is rational. Knowledge  $\rightarrow$  justification  $\rightarrow$  rationality. K $\rightarrow$ R.
- 2. Epistemologists are interested in epistemic rationality=a rationality which aims at the goal of true belief. Non-epistemic rationality, aims at another goal than true belief. E.g. Jumping at a ravine—non-epistemic rationality, aims at survival. The purpose is not truth, but survival. One needs to have a good impression of oneself to survive, truth is unimportant. Arguments to believe in God: Thomas Aquinas—there exists a first cause which is God. It is epistemologically rational to belief in God. Pascal's Wages—believe in God to not go to Hell if he does exist. It is non-epistemologically rational to believe in God (even if it is a small epistemic chance to exist one still need belief)
- 3. Maximizing true beliefs=belief as many true beliefs as possible. A. trying to believe as many true believes as possible. Most efficient: Belief all false and truth belief—leads to irrational behaviour (one is not closer to truth). B. trying to belief as less false beliefs. Most efficient: Do not belief anything—(one knows nothing) irrational behaviour. C. finding the right balance between false and true beliefs (not overly cautious or reckless)
- 4. Maximizing true beliefs, utility problem. Learning the 1000 digits of pi is not useful. However, learning 1000 digits of pi is **epistemic rational**, but **non-epistemically irrational**. This shows that there is more to life than epistemic rationality. This shows that epistemology loses importance if it is not important for life (P:E is only concerned with epistemic rationality. P:L's behaviour is epistemically rational, yet dull. C: E can be dull). Response to the problem.
- 5. L's behaviour is **epistemic irrational** after all. Important truths lead to others truth. Unimportant truths are isolated from other truths. Thus it is **epistemic rational** to search important truths. L's belief is unimportant→epistemic irrational.
- 6. Rationality and responsibility. R beliefs by taking into account evidence-rational and responsible. I beliefs by tossing a coin—irrational and irresponsible. (responsible because they can choose from different alternatives). Problem 1: Seeing a picture of Barak Obama links with the automatic belief that is Barak Obama. This belief is not a choice between alternatives—one is not responsible? Is it epistemically rational to form this belief? Problem 2: Denis tosses a coin and believes the he is guilty. Denis believes that is right what he is doing. Is he irrational? Is he irresponsible?
- 7. Deontic epistemic rationality=rational following one's rules. According to this Denis is epistemically rational and responsible. Epistemic norms=epistemic rules for attaining truth (taking evidence into consideration, weight the evidence, be impartial) Non-deontic rationality=rational by following epistemic norms and those norms are right. Deni's behaviour: deontic epistemic rational but non-deontic irrational. Denis is

responsible. If it is **deontic epistemic rational** it is **responsible**. If it is **deontic epistemic irrational** it is **irresponsible**.

- Deontic epistemic responsibility is linked with rationality, it is in one's control— Internalist. Non-deontic epistemic rationality is not linked with responsibility, it is not within the agent's own control (other factors influence: being taught the right rules) —externalist.
- 9. Internalist—in one's control, it depends on one's internal conditions. Externalist—depends on conditions which (partially) one is not in control. Internalist externalist justification/rationally. Denis is justified in the internal sense. Denis is not justified in the external sense. Internalist: justified true belief but not knowledge—mismatch. Externalist: not justified true belief and not knowledge—match. (This cases are different than Gettier cases which do not match even if they follow the right epistemic norm).
- 10. For an internalist Theo the toddler which holds a toy does not know that he holds a toy—his belief is not formed by consciously following an epistemic norm, Theo's belief is not formed in a responsible way→It is **not justified**.
- 11. For an externalist Theo the toddler has knowledge, the external conditions justify him (he knows through an appropriate process in appropriate circumstances)
- 12. Internalists **over-intellectualize** knowledge, the agent needs to be in control of all surrounding factors. This clearly excludes agents with limited mental capabilities and animals.
- 13. **Positive introspection**=you know that you know that p (KK principle). Kp $\rightarrow$ KKp. You know that p only if you know that you know that p. Internalists accept KKp, but externalists reject it.
- 14. We have many intuitions about knowledge, some hard to reconcile. There is a direct connection between epistemic rationality and justification → externalists. There is a direct connection between epistemic rationality and responsibility → internalist.

Virtues and Faculties

- Def: knowledge is a kind of cognitive success credible to the agent. Attempt 1 to develop an epistemic theory based on def: JTP (failed, Gettier cases). Attempt 2, reliabilism: reliability instead of justification (reliable methods, likely to lead to true beliefs).
- 2. Reliability explains normal cases and the stopped clock Gettier case (looking at stopped clocks is not a reliable manner of forming belief)
- 3. Problem 1 for reliablism: S has a reliable source, still Bp is based on luck. The thermometer case: Y operates a thermostat and changes temperature accordingly to the broken thermometer and S looks at the thermometer and forms a reliable true belief, yet it is not knowledge. Broken thermostat + Y operates thermostat=reliable source of knowledge. {The belief adapts to world in normal cases. The world (temperature) is adapted to belief (thermostat) in the thermostat case}.
- 4. Looking at stopped clock-unreliable. Looking at stopped clocks exactly after a multiple of 12 hours-reliable. Looking at a broken thermometer while Y operates a thermostat-reliable. To solve the problem of reliablism, some propose to focus on the reliability of the agent's own methods—virtue epistemology. (operating a thermostat is external to the agent, eyesight is internal to the agent) (the reliability of the belief

formed by S in the thermometer case is not due to S's epistemic virtues/cognitive faculties, but due to the thermostate)

- 5. Virtue epistemology. Definition of knowledge: (the archer analogy) true belief formed based on reliable epistemic virtues/cognitive faculties.
- 6. Epistemic virtues: character trait that helps S form true beliefs (psychological, can be acquired and exercised, typically accompanied by reflection—conscientiousness → 'internalized' epistemic norm). Cognitive faculties: process that helps S form true beliefs (more physical/physiological, typically not accompanied by reflection—eyesight, talent for abstract thinking) Epistemic virtues: psychological, based on reflection, can be taught.
- 7. Virtue epistemology is a kind of reliablism (reliabilism of agent, agent's epistemic virtues/cognitive faculties). Normal reliablism (just cares about the belief-forming process, no further details about the process).
- 8. Problem 2 for reliabilism: Chuck the chicken-sexer thinks the he determines the sex of chicken based on touch/sight but is in fact smell. Chuck has a reliable true belief reliable due to epistemic virtues or cognitive faculties. According to virtue epistemology it is knowledge. However, some say it is not since Chuck cannot give good reasons for thinking that his beliefs are true (Chuck does not know how Chuck knows p) Internalist—Chuck does not know. Externalist—Chuck knows. Epistemic virtues—internalist (S cannot exercise virtue without realizing that S exercises it). Cognitive faculties—externalist ( S can exercise virtue without realizing S exercise it). Internalists: Chuck's belief is not formed on epistemic virtues and thus is not knowledge.

#### Sources of Knowledge

Perception

- Distinct philosophical problems: perception as a source of knowledge, how to individuate the senses (synaesthesia). Problem with perception, the senses can deceive us (seeming does not entail being). Perception error→false belief (not knowledge). E.g. the bent stick—due to light refraction a stick under water seems bent, even if it is not—lake mirage, Muller-Lyre line length illusion <-> >-<.</li>
- 2. Sense perception is a fallible way of gaining knowledge (sometimes deceives us). We can correct for misleading perception by taking rule x into account. Sense perception is indirect—the real problem.
- 3. The case of Jack and Jill:

Jack sees a lake and there is a lake.

Jill sees a lack and there is no lake.

Jack and Jill's perception is not of the world itself, but of a sensory impression.

Perception is indirect—gap between sensory impression and the world.

This gap should be bridged, how?

By inference. Sense perception tells nothing by itself about the world, S needs to infer from it that the world is X. I see a lake, it is not a mirage  $\rightarrow$  there is a lake. In case of Jack the inference goes right, in case of Jill it goes wrong.

4. Perception vs testimony. Perception is less secure than is thought of: perception is preferred over testimony. Testimony relates us indirectly (diff in time and space) while perception relates us to the world directly. However, perception is also indirect, thus is it more reliable than testimony after all?

- 5. Indirect realism—ontological: realism, epistemological: indirect. Realism: there exists a world independent of our perception of it. Arguments for indirect realism: argument from illusion (Jack and Jill)—a. illusions show that perception is indirect b.it is common sense that there is an independent world. The distinction between primary and secondary qualities—a. any good philosophical theory about perception makes this distinction, b. indirect realism explains this distinction very well. (primary: properties of object independent from agent, shape. Secondary: properties of objects partially dependent on agent, colour).
- 6. Problem with indirect realism. What if the gap between perception and world is too large? Perceptual knowledge is inferential, the inference can go right or wrong. There can be an evil demon making perception totally different than how the world is→sense impressions are not a guide at all of how the world is (perception does not entail knowledge of the world). For an indirect realist 'if there is an external world' is difficult to answer since all knowledge about the world is indirect.
- 7. (Subjective) Idealism—there exists no world independent from our perception of it. Only secondary qualities. Realism: the world gives rise to perceptual experience. Idealism: the world is constituted by perceptual experience. Idealist: we have knowledge of the world, the meaning of 'world' changed drastically (If x is not perceived, x does not exist). ForBerkley X always exists because God always watchesX.
- 8. Transcendental idealism—All knowledge about the world is that of how S perceives it but S must assume there exists an external world (Kant). Indirect realists (Locke, Hume, Russel) assume that S can have perceptual knowledge about the world through inference.
- Direct realism—no gap between perception and the world. In the bent stick case S does not perceive reality directly, but S does not need to generalise that in other cases S does not have direct perception of reality.

Why would we want to generalize anyway? Not because deceived cases make most of our cases, but because we cannot **distinguish** between a deceived and a non-deceived case. (being able to **distinguish** is a necessary condition for perceptual knowledge)

10. Indirect realism (internalist)/direct realism (externalist)—distinguishing is a necessary condition of perceptual knowledge for Internalists. Distinguishing is not a necessary condition of perceptual knowledge for externalists. Internalist—S knows P only if S knows that S knows p—knowledge is done consciously by the agent. Externalist—S knows P even if S does not know that S knows. (Internalist—Jack and Jill do not know. Jack is unable to kkp, unable to distinguish between mirage case and reality) (Externalist—Jack knowns, Jill does not. Jack does not need to be able to distinguish, his perception works properly).

Testimony and Memory:

- Testimony allows for distance in space and time. (S knows about things from the past and from place S never been) Testimony=intentional transmission of information. If S has true beliefs based on testimony, on what condition it is knowledge? According to JTP: What is the justification in case of testimony. According to reliablism: what is the reliable process in the case of testimony.
- 2. You can verify testimony by comparing with other testimony or by seeing if utterer has an interest. However, is testimony reliable at all?

- 3. Social epistemology: testimony is multi-agent in nature. Disagreement among epistemic peers. Collective epistemic agency. 'If that were true, I would have heard until now'. Multiple people: chains of testimony
- 4. Truman show—credulism (testimony reliable until special exception) or reductionism (verify testimony based on non-testimony). (local beliefs and non-local belief, you cannot deduce from reliability about local beliefs reliability about non-local beliefs) (reductionism can save only local beliefs. Credulism saves both) (If S source states P which is verified then P is true/If S source has been reliable in the past when stating P then P is true (presupposition)). (The justification given by credulism is based on common sense but not on philosophical argument, maybe S should be more cautious)
- (externalism—credulism states that testimony due to evolutionary argument is a reliable process in both local and non-local cases) (internalist—reductions states that S does not kkp thus S does not have knowledge about non-local testimony). Memory on the same model as testimony

A priority and inference—Thinking and reasoning as a source of knowledge.

- extending our knowledge/gaining new knowledge. A priori=gained without/before investigating at all the world. (all bachelors are unnmaried) A posteriori=gained by/after investigating the world (I know John is a bachelor). Testimony, perception=a posteriori. A priori, non-empirical, or a posteriori justification, empirical. If you have a priori knowledge of a proposition you can have a posteriori knowledge of that proposition. You cannot have a priori knowledge of a posteriori proposition. (Most cases can be grouped as a priori or a posteriori)
- 2. A priori and a posteriori information can interact with each other. E.g. Premise 1: Billy did it or Bob did it or someone else did it Premise 2: Billy was in Spain last Sunday Premise 3: if Billy was in Spain last Sunday, he did not do it Premise 4: Bob was with you last Sunday Premise 5: if Bob was with you last Sunday, he did not do it Conclusion 1: Billy did not do it (from P2 and P3) Conclusion 2: Bob did not do it (from P4 and P5) Conclusion 3: someone else did it (from P1, C1 and C2)
- 3. Thinking can hold by itself new knowledge: mathematics, logic, introspection (of your own emotions. Reasoning can help us extend our knowledge: by a priori and a posteriori means.
- 4. Epistemic closer: Modus ponens—against skepticism (optimistic). Modus tollens—pro skepticism (pessimistic). Have hands→not being deceived by an evil demon.
- 5. Deductive validity: validity—appropriate logical structure, If premises are true the conclusion must be true. A valid argument can have false premises and conclusion. Sound argument: valid + true premises. Deductive arguments are a good way to expand knowledge, by knowing the premises you know the conclusion. (If you know premises you also know conclusion, know is factive preserves truth in the whole deduction) (justification in premise p does not mean that S knows p and S knows conclusion)
- 6. Inductive reasoning: the premises support the conclusion more if they are a large and representative sample but never lead to 100% certainty. True premises (S knows them) can lead to false conclusion. You do not know the conclusion, but you are in a

position to have justified belief in it. Inductive reasoning is not a good way to expand knowledge. Inductive reasoning is good for expanding justified beliefs.

- 7. Abductive reasoning: Premise: Billy's DNA was found at the crime scene. **Conclusion**: Bill was at the crime scene.
  - The (main) premise is a fact (often felt to be surprising) that is supposed to be explained by the conclusion.
  - The premise guaranty the conclusion, but not 100% (might be true premises and false conclusion).
  - What is best explanation? The simplest explanation=the explanation which requires the simplest and most conservative additional premise—Why? In the past the simples explanation proved to be the best explanation—inductive argument, not 100% truth-preserving.
  - Abductive is bad for expanding knowledge (know p but conclusion can be false) but good for expanding justified belief.
- 8. Charles S. Peirce and the beans:

#### **Deduction:**

all beans in the bag are white these beans come from the bag hence, these beans are white Induction:

### Induction:

these beans come from the bag these beans are white hence, all beans from the bag are white **Abduction**: these beans are white all beans from the bag are white hence, these beans come from the bag

#### Scepticism

1. Types of scepticism

Local scepticism: we cannot have certain types of knowledge (e.g. **source**: testimony, perception; **subject**: moral knowledge, religious knowledge)

Radical scepticism: we cannot have any knowledge at all.

- Scepticism about other minds (local—subject matter)
   Is the belief "Other people have minds" knowledge? We have knowledge of this
   indirectly, through abduction (inference to best explanation)—P1:I observe John have
   behaviour X; P2(A): If John has a mind, then he'll display this behaviour C: John has a
   mind. Alternative explanation of behaviour: John is a philosophical Zombie.
  - The argument from analogy (Mill): P1: I know my mental states; P2:there are regularities between mental states and own physical behaviours; P3: If we observe the same physical behaviour in others, we infer that they must have the same mental states. Inductive argument: In my case physical behaviour and mental states correlate→In the case of others it can also correlate. Problem with this argument: unrepresentative sample, very narrow (we cannot increase it since we lose the direct access through introspection).

Can we know that other minds are similar to ours? If X has mental states sufficiently different than I, then X will behave different than I. From difference in behaviour, we

can infer difference in mind. Problem: If John sees 'green' and says 'red' when John sees a red object (john sees 'red' and says 'green' when John sees green object) then you cannot know John's mental states.

- 3. Radical scepticism:
  - Mainly a methodological function: If your favourite epistemological theory does not answer the sceptical challenge, then it's not a very good theory.
  - Sceptical scenario: P1: You are radically deceived by the world, P2: Your experience is entirely normal, C: You cannot know that you are in such a scenario. E.g. Evil genius (Descartes, brain in a vat (Putnam), The Matrix
  - The sceptical argument: If **a**. S cannot know that S is not in a sceptical scenario, then b. S cannot know anything at all (implicit premise). **a**. is the case. By contraposition: If you can know anything at all, then you know that you are not in a sceptical scenario.
  - Epistemic closer: the implicit premise is a version of the closer principle. Closer: If S knows p and p→q, then S knows Q. The sceptic uses a specific instance of this principle: I know that I have hands (ordinary proposition)→I am not in a sceptical scenario (Closer: Knowledge→knowledge)
  - Addressing the sceptical challenge by attacking closer.
- 4. Sensitivity as a problem for closer
  - Sensitivity: If p had been false, then S would not have believed p. Sensitivity is a necessary condition for knowledge. (works on counterfactuals, non p→non Bp, in all nearby possible worlds in which p is false, S does not believe p)
  - Safety: Bp→P. In all closest possible worlds in which S believes p, it is indeed p. (Sensitivity and Safety are contrapositive but not logically equivalent. Sensitivity—counterfactual. Safety—ordinary material condition)
  - Sensitivity and Safety do not work in Gettier cases (S believes that it is 8.20 while it could have been 8.21, the clock is broken. Belief is not an indicator of facts) and in sceptical scenarios (S can 'not believe that he is a brain in a vat' when S is a brain in a vat).
  - Sensitivity and closer: Scepticism—not sensitivity→not knowledge. Ordinary case—sensitive→knowledge. Argument: P1: George believes "I sit at a computer", P2: George believes that "If I sit at a computer, then I am not a brain in a vat", C: "I am not a brain in a vat". Failure of closer, P1 can be knowledge, P2 cannot be knowledge.
- 5. Responses to scepticism—accepting closer (but turn it against the sceptic)
  - Moore: Modus ponens (If hands than not sceptical scenario, I have hands). Sceptical argument: Modus tollens (If hands than not sceptical scenario, you cannot know that you are not in a sceptical scenario. C: you cannot know anything at all) (Moore uses modus ponens to attack the sceptical argument)
  - Keith DeRose, contextualist response: some words are context-sensitive (the standard for stating p depends on context) like 'know'. Low-standard context of 'know': all beliefs amount to knowledge. High-standard context of 'know: none of beliefs amount to knowledge. No violation of closer. S with his friends knows p but in the epistemology seminar S does not know p. Problem with contextualism: the context can shift in the middle of the argument (like in the George and sitting at the computer example/scepticism discussed in a bar)