

# What is Knowledge?

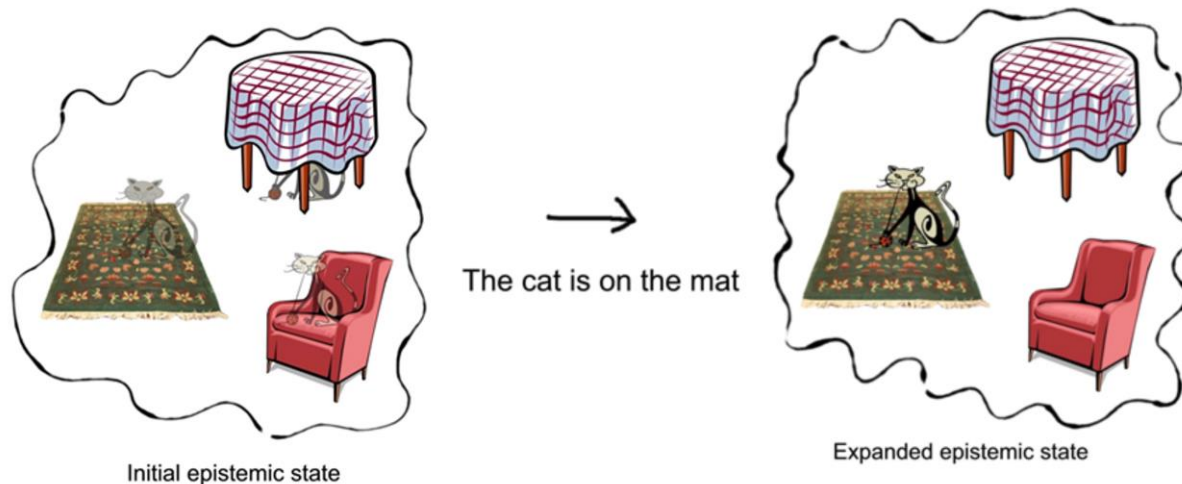
Do you need *evidence*?

# “Propositional” knowledge

- “... many of the most intriguing questions about knowledge turn out to be questions about propositional knowledge. It will be the focus of this book.” (p. 12)

# What are “propositions”?

- Chunks of information
- Belief contents
- (Subjective) meanings of sentences
- Intended changes of epistemic state by the speaker of a sentence.



# JTB theory ( $K = J + T + B$ )

“the traditional conception of knowledge.”

S knows that  $p$  =<sub>df</sub>

(i) S believes that  $p$

(ii)  $p$  is true

(iii) S is justified in believing  $p$ .

These 3 conditions are “individually necessary and jointly sufficient” for knowledge.

# Belief (recap)

- To believe  $p$  is to take  $p$  to be true.
- Belief is a matter of degree (subjective probability)
- Only 'good' beliefs, those with nothing wrong with them, count as knowledge.

# Non-occurrent beliefs?

- Can a belief be held at time  $t$ , even if one is not consciously assenting to it at time  $t$ ? E.g.
  - “I am human”
  - “Zebras don’t wear Gore-Tex jackets”
  - “My roof is leaking”
- A **dispositional belief** is one where:
  - the person does not have the proposition explicitly in mind
  - They are *disposed* to assent to it when asked.

# Strength of belief

- How *strongly* must the person believe the proposition in question?
- The Cartesian view requires that the person have **no doubt at all** that the proposition is true.
- But are following beliefs (things I know) held with certainty? (Could they be false?)
  - My dog is in the yard where I just left him
  - Obama was elected president in 2008
  - It is very hot in the center of the sun

# A Digression on Method

- What do we do if the following are in conflict?
  - Intuitively clear cases of knowledge (and non-knowledge)
  - General theories about what knowledge is
- Intuitive judgments about particular cases are a central and essential part of our basis for understanding and delineating concepts like the concept of knowledge.
- There is no apparent reason to regard these intuitive judgments as infallible.
- (Reflective equilibrium? John Rawls)



# Knowledge requires truth

- Bonjour: “The aim of the cognitive enterprise is **truth**” (p. 30)
- “... we attempt to accomplish this by seeking beliefs for which we have **good reasons** or **strong justification**”
- But (if the degree of justification is less than 100%) a strongly justified belief can be false.
  - Such a JFB can be called “attempted knowledge”
  - (Do we have **internal access** to whether a given belief is real or attempted knowledge?)

# What *is* truth?

- Bonjour endorses a correspondence theory of truth (as most analytic philosophers do).
- On this view, in addition to the many and conflicting human viewpoints about reality, there is also a single viewpoint-like entity called “the facts”, or “the **actual world**”.
  - [Colourfully called “the God’s eye view”, or “the view from nowhere.”]
- The actual world is something similar to a proposition, since it stands in logical relations like consistency and consequence with propositions.
  - The actual world is an ultimate (i.e. non-defeasible) *authority* for human belief.

# Correspondence to objective facts

- Objective facts seem to be very much like propositions, except that they are somehow objective, or “in the world” rather than “in the head”.



Subjective proposition



Objective fact

# Truth and possible worlds

- Let @ be the “actual world”, the maximal actual state of affairs. Then we can define:
  - Proposition  $p$  is true iff  $@ \Rightarrow p$ .
  - Proposition  $p$  is false iff  $@ \Rightarrow \neg p$
- N.B. All possible worlds are maximal. Hence @ determines the truth value of every proposition.
- We can use consistency here instead of consequence.

# A problem with correspondence ...

- I said that “The actual world is something similar to a proposition, since it stands in logical relations like consistency and consequence with propositions”,
  - Isn’t this odd?
- As Bonjour says, objective reality is generally assumed to be mind-independent and nonconceptual.
  - But this theory of truth seems to posit a correspondence relation between two conceptual, proposition-like entities.

# Response #1: Anti-realism

- “there is nothing to be said about either truth or rationality apart from descriptions of the familiar procedures of justification which a given society—ours—uses in one or another area of inquiry.”
- “... we should think of “true” as a word which applies to those beliefs upon which we are able to agree, as roughly synonymous with ‘justified’. ...”  
(Richard Rorty, *Science and Solidarity*)

- “ ‘Truth’ is to be understood as a system of ordered procedures for the production, regulation, distribution, circulation and operation of statements”.
  - “Each society has its regime of truth, its ‘general politics’ of truth: that is, the types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements ...”
  - (Michel Foucault interview, “Truth and Power”, 1977)

# Response #2: Kant's idealism

“In the Critique of Pure Reason Kant argues that space and time are merely formal features of **how we perceive objects**, not things in themselves that exist independently of us, or properties or relations among them.” (Stanford Encyclopedia of Philosophy)

- The real (“noumenal”) world, the “thing in itself”, is permanently unknowable to us, says Kant.
- The world that common sense (and science) describes is the “phenomenal” world, which is the world as interpreted using our *a priori* concepts.



# Kant's idealism

- The *a priori* concepts that our minds use to structure the world include:
  - Space (Euclidean geometry)
  - Time (linear, independent of space)
  - Cause and effect
  - Quantity (numbers)
  - Substance and property
  - Existence
  - Necessity

# Kant's idealism

- “Kant didn't deny, of course, that there are such things as horses, houses, planets and stars; nor did he deny that these things are material objects. Instead his characteristic claim is that **their existence and fundamental structure have been conferred upon them by the conceptual activity of persons.** According to Kant, the whole phenomenal world receives its fundamental structure from the constituting activities of mind. ...”

(Alvin Plantinga, “How to be an anti-realist”, *Proceedings and Addresses of the American Philosophical Association*, Vol. 56, No. 1. (Sep., 1982), pp. 47-70.

# Idealism vs. realism

“... everything intuited in space or in time, hence all objects of an experience possible for us, **are nothing but appearances, i.e., mere representations**, which, as they are represented, as extended beings or series of alterations, have outside our thoughts **no existence grounded in itself**. ...

The realist ... makes these modifications of our sensibility into things subsisting in themselves, and hence makes mere representations into things in themselves”

- Kant describes realism as a “common but fallacious presupposition”

# Kant's "Copernican revolution"

“If our intuition has to conform to the constitution of the objects, I don't see how we can know anything about them a priori; but I can easily conceive of having a priori knowledge of objects if they (as objects of the senses) have to conform to the constitution of our faculty of intuition”

Kant, *Critique of Pure Reason*, 1781, Preface (second edition) xvii.

- For Kant, the external world (figuratively) “revolves around” the mind, rather than vice-versa.
- Science requires that we have synthetic *a priori* knowledge, but such knowledge is possible only if the world that science describes conforms to our concepts.

# Response #3: Theism

“Even if there were no human intellects, there could be truths because of their relation to the divine intellect. But if, *per impossibile*, there were no intellects at *all*, but things continued to exist, then there would be no such reality as truth.”

(*De Veritate* Q. 1, A.6 Respondeo).

- On Aquinas’s view, objective reality (the God’s Eye View) is **conceptual**, so there isn’t any problem with it corresponding to (entailing, etc.) our propositions.
- Also, human reason is the “natural light”, enabling us to know the objective truth.

# Augustinian theism

- Aquinas accepts ‘Augustinian theism’, the view that abstract entities such as universals and possible states of affairs depend for their existence on the divine mind.
- “Plato’s Ideas are certain archetypal forms or stable and immutable essences of things, which have not themselves been formed but, existing eternally and without change, **are contained in the divine intelligence**. They neither arise nor pass away, but whatever arises and passes away is formed according to them.” (Augustine, *De Ideis* 2)
- (Rorty also thinks that the correspondence theory is “religious”)

# Gregory Chaitin on math



# Theism in philosophy?

“For Leibniz, a possible world is a complete, consistent, fully determined idea in the mind of God. ...

The challenge for modern possible-world theorists is to find a more metaphysically plausible understanding of this helpful semantic device.”

Andrew Irvine, *Analytic Philosophy: A user's guide*, p. 134 (forthcoming in 2024)

- (309 years later, we're still looking ...)



# Standpoint theory

- Standpoint theory starts with the sensible claim that people with different positions in society experience the world differently, and so end up knowing (somewhat) different things.
  - E.g. Marx said that the proletariat know about the exploitation of the working class by the bourgeoisie from their lived experience, but the bourgeoisie are blinded to this by their class interests.
  - Similarly, feminists say that men in our society are blind to the patriarchal elements of our society, and how these oppress women, but women know it from experience.

# Standpoint theory

- The milder claims of standpoint theory are part of basic critical thinking, e.g. people have cognitive biases based on their interests.
  - E.g. drivers vs. cyclists!
- More extreme claims of standpoint theory are cases of epistemic relativism, where rigorous data collection, logical reasoning, objectivity etc. are rejected as “white supremacy”, or “patriarchy”, and only “lived experience” is regarded as authoritative.

# Coherence theory of truth

- “According to this view, the truth of a believed proposition simply consists in its fitting together coherently with other propositions that are believed, where coherence involves both logical consistency and (usually) other relations of mutual support or explanation.”
- It’s not a serious view (unlike the coherence theory of justification).

# The redundancy theory (deflationism)

(T) “It is true that snow is white”  $\Leftrightarrow$  “snow is white”

- (T) shows that truth isn't a metaphysical property of sentences, but just a convenient linguistic device.
- Alternatively, (T) shows us that truth acts like an ultimate (non-defeasible) epistemic authority.
  - Given that there's evidence against  $p$ , but  $p$  is true, then we are compelled to believe  $p$ .

# Part 2

What is a justified belief?

# Justification

- Knowledge is more than true belief.
  - In fake math symbols,  $K > T + B$
- Traditionally, “one further ingredient is needed: **a sufficiently strong reason or justification** for thinking that the claim in question is true”

# Why is justification needed?

- A pessimist believes that it will rain during the picnic, and it does. (But the pessimist *always* predicts rain, and is wrong most of the time.)
- “...a person on a multiple-choice type quiz show has no idea at all about the answer to a particular question and simply hits the right answer by luck ...”
- To **fill the gap between true belief and knowledge**, apparently something else is needed. “Justification”

# Different types of justification

- “Justification” here is *epistemic*, rather than moral or prudential. There must be *truth-conducive* reasons to hold the belief.
  - Loyalty provides a *moral* justification for believing your friend’s story, but not epistemic justification.
  - A ball player’s belief that he will win the game is (prudentially) justified by the fact that such a belief will improve his performance.



# What *is* epistemic justification?

- Feldman takes an ‘evidentialist’ view of epistemic justification.
  - A belief is justified if one has good enough *reasons* to hold the belief, strong *evidence* for it, etc.
  - Justification requires strong evidence, but not *conclusive* evidence.
  - E.g. W. K. Clifford’s negligent ship owner lacks evidence.

# Total evidence condition

- A person can have strong evidence for  $p$ , and see clearly how that evidence supports  $p$ , and yet not be justified in believing  $p$ . How is that possible?
- Because the person has even better evidence that  $p$  is false!
- A justified belief must be probable (at least) on the person's *total* evidence. (No “cherry picking”.)

# Clifford's ship owner lacks evidence

- Even though he has *arguments* that the ship will not sink!!!

“He said to himself that she had gone safely through so many voyages and weathered so many storms that it was idle to suppose she would not come safely home from this trip also.”

“He would put his trust in Providence, which could hardly fail to protect all these unhappy families that were leaving their fatherland to seek for better times elsewhere.”

# BonJour criticises evidentialism

- BonJour suggests that evidentialism only applies to beliefs that are products of **inference**.
- Beliefs that arise from perception, memory, introspection or logical intuition don't seem to have any supporting evidence.
  - (There is no “separate body of information that supports the proposition in question”.)
- However, he says:
  - One does have a “basis” to think such beliefs are true.
  - And one is *consciously aware* of that basis.

# Epistemic duties

- Many philosophers see justification as a matter of “fulfilling your epistemic duties”.
  - Being “epistemically responsible”
  - Being “epistemically diligent”
  - Doing your best (within practical limits) to check and verify that your belief is likely to be true.

# 'Epistemic duties' – Laurence Bonjour

(*The Structure of Empirical Knowledge*, p. 8)

“... one’s cognitive endeavors are justified only if and to the extent that they are aimed at this goal [truth], which means very roughly that one accepts all and only those beliefs which one has good reason to think are true. To accept a belief in the absence of such a reason ... is to neglect the pursuit of truth; such acceptance is, one might say, *epistemically irresponsible*. My contention here is that the idea of avoiding such irresponsibility, of being epistemically responsible in one’s believings, is the core of the notion of epistemic justification.”

# Epistemic duties

- Feldman doesn't think these epistemic duties extend to gathering more evidence.
- He even rejects the idea that justification requires gathering all the evidence that's **easily available**.
  - E.g. can a belief about when a movie is showing today be justified, if it contradicts what's written in a newspaper *that you're holding*?
- What do you think?

# Epistemic duties

- Is it epistemically responsible to trust and accept beliefs that form *spontaneously* within one's own mind?
  - What about strange hunches?
  - What about pessimistic (or optimistic) beliefs?
  - What about (apparent) clairvoyant experiences?
  - What about (apparent) sense perceptions, memories, logical intuitions, etc.?
- If we do have epistemic duties to check, verify, gather more evidence, etc. then how far do they extend?



## Assurance: What if we *feel very certain*?

... But when I turn my thought onto the things themselves—the ones I think I perceive clearly—I **find them so convincing** that I spontaneously exclaim: ‘Let him do his best to deceive me! He will never bring it about that I am nothing while I think I am something; or make it true in the future that I have never existed, given that I do now exist; or bring it about that two plus three make more or less than five, or anything else like this in which I see a plain contradiction.’

(Descartes, *Meditations*)

Locke also refers to “the assurance we have from our senses themselves that they don’t err in what they tell us about the existence of things outside us when we are affected by them” and says:

“As for myself, I think God has given me assurance enough of the existence of things outside me.”

(*Essay*, Book IV, Ch. Xi part 3)

“The best assurance I can have, the best my faculties are capable of, is the testimony of my eyes; they are the proper and sole judges of this thing. I have reason to rely on their testimony as being so certain that I can no more doubt that while I write this I see white and black and something really exists that causes that sensation in me, than I can doubt that I write or that I move my hand. This is a certainty as great as human nature is capable of concerning the existence of anything except oneself and God”

- (Locke, *Essay*, Book IV, Ch. Xi part 2)

# A duty to trust?

- Perhaps one of our epistemic duties is to pay attention to this feeling of assurance, and withhold belief when it is absent?
- (And we have a duty to accept the belief when it is present?)
- (Probably with some exceptions. E.g. if the perceptual belief contradicts, or is undermined by, existing firm beliefs.)

# Is internal access needed for justification?

“Such examples make it reasonable to conclude that there is epistemic justification for a belief only where the person has **cognitive access** to evidence that supports the truth of the belief. Justifying evidence must be **internally available**.”

Earl Conee (*The Monist*, July, 1988 p. 398)

# Internal access *is* needed for *duties*

“Suppose you take on a new job at the nuclear power plant and I instruct you to press a certain button if the temperature of the reactor core goes above a certain point.



You see a dial which is labeled “Reactor Core Temperature.” You ask me, “So what you mean is, I should press this button whenever the indicator on that dial goes above that line?”

Now suppose I respond, “No, that’s not what I mean. That dial might not be working properly. I want you to press the button whenever the reactor core *is* above the danger point, regardless of what that dial says.”

(From Jim Prior’s web site)

Can you do that?

- “Internalism” in epistemology (KI) refers to 3 related claims:
  - i. Access internalism*: knowledge requires actual or possible *access to one’s evidence* for the belief.
  - ii. Duty (‘deontological’) internalism*: knowledge requires that the belief is formed in an epistemically responsible way.
  - iii. Mentalist internalism*: what ultimately justifies any belief is some mental state of the epistemic agent holding that belief.

[KI = Knowledge Internalism]

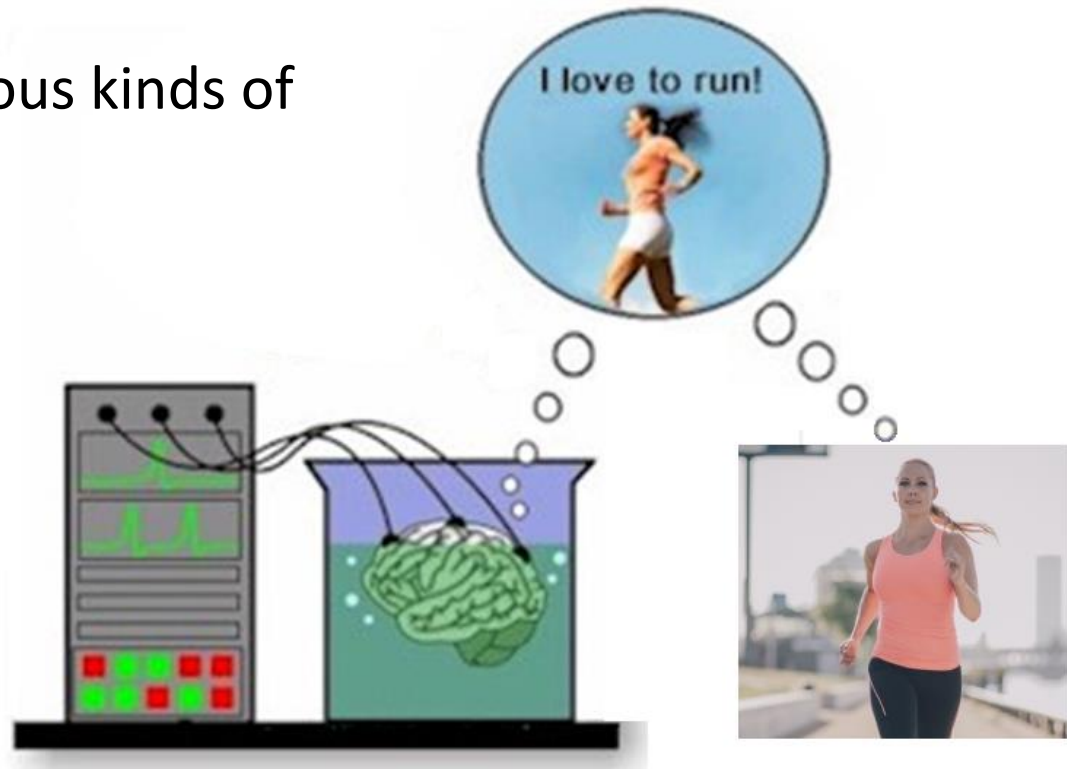


# Two kinds of “access internalism”

- **Actual Access KI:**  
One knows some proposition  $p$  only if one *is* also aware of one’s knowledge basis for  $p$ .
- **Accessibility KI:**  
One knows some proposition  $p$  only if one *can become aware by reflection* of one’s knowledge basis for  $p$ .

# Brain in a vat and *justification*

- The normal woman's sensory beliefs are justified (I guess?)  
What about the other woman's beliefs?
- What do the various kinds of internalism say?



# Clairvoyance case

- Suppose that Bob and Carol have clairvoyant experiences that are internally indistinguishable.
- Carol is (unknown to her) a true clairvoyant. Bob is mentally ill, and hallucinating.
- Let's say they both trust their spontaneous clairvoyant beliefs, since they feel the *assurance* that Locke spoke of.
- Are Carol's spontaneous clairvoyant beliefs justified? Are Bob's? (What do internalists say?)

# “Externalism”

Externalists think that the gap between knowledge and true belief can only be filled by something ‘external’, i.e. something that we have no cognitive access to. Some such suggested external states of affairs are:

1. The belief that  $p$  is caused by the fact that  $p$ .
2. The belief is formed by an objectively *reliable* cognitive process.
3. The cognitive process that formed the belief was *working properly*.
4. The belief “came from the mint of nature”.

# Strong vs. weak knowledge

- Descartes said that knowledge requires infallible (100%) justification for the belief.
- In this case  $J \Rightarrow T$ , so  $K = J + B$ .
- This theory fits many people's intuitions about knowledge.
  - If a person admits that  $p$  is possibly false, then they cannot also claim to know  $p$ .

# Fallibilism vs. infallibilism

- These beliefs could be false. So are they knowledge?
  - My dog is in the yard where I just left him
  - Obama was elected president in 2008
  - It is very hot in the center of the sun

# Fallibilism

- N.B. Fallibilism can be accommodated within internalism, e.g. the JTB theory.
  - Knowledge requires a true belief with a *very high* degree of justification (e.g. knowledge requires 95% rather than 100% justification).
- Fallibilism is also a feature of *all* externalist theories that don't even make justification a condition for knowledge.
  - If justification isn't necessary for knowledge, then *a fortiori* 100% justification isn't necessary!

# Lottery argument against JTB fallibilism

- Suppose you buy one lottery ticket, out of a total of 100,000 that are sold.
  - The winning ticket will be determined by a fair, random draw.
  - Being rational, you strongly believe that  $\neg W$  (“I won’t win”)
  - The epistemic probability of  $\neg W$  is 0.99999
  - Your belief in *true*. (Sadly)
- 
- Did you *know* that you wouldn’t win?





# Lottery argument

- What do externalist theories say about the belief that you won't win? Is it knowledge?
- Causal theory
- Reliabilism
- Proper functionalism
- Mint of nature

# Is infallibilism based on confusion?

(See Feldman pp. 124-5)

- It seems right to say that:  
    “if  $S$  knows that  $p$ , then  $p$  cannot be false”.
- (I.e. truth is a necessary condition for knowledge.)
- In modal logic this is:  
     $\Box(S \text{ knows } p \rightarrow p \text{ isn't false})$

- But “if S knows that  $p$ , then  $p$  cannot be false” is ambiguous. It *could* be read as:
- $(S \text{ knows } p \rightarrow \Box(p \text{ isn't false}))$ .

$\Box(A \rightarrow B)$  vs.  $(A \rightarrow \Box B)$ . See the difference?

(The necessity of the *consequence* vs. the necessity of the *consequent*.)

E.g. see the fallacy here?

- “Fred could have gotten married last fall.”
- “Nonsense. Fred is a bachelor. Bachelors are necessarily unmarried. Therefore Fred is necessarily unmarried.”

# Is infallibilism based on confusion?

- The second interpretation of “if  $S$  knows that  $p$ , then  $p$  cannot be false”, i.e.  $S$  knows  $p \rightarrow \Box(p \text{ isn't false})$ , says that knowledge is infallible.
- Is this why infallibilism sounds right?

# Inductive Scepticism

- Another thing that one can be sceptical about is scientific knowledge, or more generally any knowledge that goes beyond immediate experience.
  - Knowledge of the future
  - Knowledge of the distant past
  - Knowledge of structures too small to see (etc.)
- According to Hume, fallibilism by itself does *nothing* to blunt the edge of inductive scepticism.

- But probable reasoning, if I have described it accurately, can't provide us with the argument we are looking for. According to my account, all arguments about existence are based on the relation of cause and effect; our knowledge of that relation is derived entirely from experience; and in drawing conclusions from experience we assume that the future will be like the past. **So if we try to prove this assumption by probable arguments, i.e. arguments regarding existence, we shall obviously be going in a circle, taking for granted the very point that is in question.**
- (*Enquiry*, Section 4, Part 2)