

# Metaphysics & Epistemology

## Introduction

# General information

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# General information

- Presentation of one paper or chapter
- Final essay of approximately 4,000 words

# Philosophy

3 main branches of Philosophy:

- Metaphysics, ontology,...
- Epistemology
- Ethics, values, social philosophy,....

# Metaphysics

- Metaphysics discusses what kind of beings there are and how they are related to one another.
- It is the branch of philosophy that studies **how things are** and not how we know them or what we ought to do.

# Relation among sciences and metaphysics

What distinguishes metaphysics from physics and the other special sciences?

- The questions that metaphysics tries to answer are mostly more general than those of the various sciences.

E.g. the question “Are there particles without electric charge?” does not come under metaphysics, but the questions “Are there properties?” & “Are there mechanisms?” belong to it.

# Relation among sciences and metaphysics

- The most precise distinction between metaphysics and the various sciences is made on the basis of method. If a question can be answered by means of empirical research, it does not belong to metaphysics. But if a question about how things are can be tackled only by means of philosophical arguments, then it comes under metaphysics.
- Also, metaphysics often tries to analyse (define) the concepts it uses.

E.g. it tries to analyse the concept of causation.

# Issues covered by contemporary metaphysics

- Causation and natural laws
- Time and space
- Freedom and determinism
- Universals and particulars
- Possible worlds
- Events
- Temporal parts
- Personal identity
- Metaphysical questions in the philosophy of mind
- .....

# Causation and natural laws

- One important problem here is how we can (if we can) define the concept of a cause.

E.g. Cases of causal overdetermination

- Similarly, there is the problem of defining the concept of a natural law: what is the difference between a *natural or scientific law* and a *universal generalization* that is true by chance?

E.g. NL: Newton's *Law of Gravitation*, Ohm's law that describes the relationship between Voltage and Current,...

E.g. UG: "everyone in this room is aged under 50"

# Causation and natural laws

- Another question is what kind of entities can be causes and effects: are they events or are they also entities of other kinds (e.g. situations)?
- Also, is it logically possible for the cause to follow the effect in time?
- In addition, we have the topic of probabilistic causation: this is the idea that sometimes the cause does not render the effect inevitable, but renders it more probable.

# Time and space

Many people have the idea that time moves, flows. Others conceive of time as a straight line, without movement.

- How can those ideas become more literal and less metaphorical?
- Are they compatible with each other?
- Is one of them closer to reality?

# Time and space

Also, time, but not space, seems to have a direction (from the past to the future).

- What does that direction consist in?
- Is it logically possible for time to exist without there being any change?
- Could time or space exist without there being any entities (objects or events) in it?

In the issue of time and space, metaphysics meets physics.

# Freedom and Determinism

**Determinism** is the proposition that, for every moment  $t$  and every moment  $t'$  after  $t$ , the state of the universe at  $t$  fully determines how the universe will be at  $t'$ .

On the other hand, when we talk here about **freedom**, we mean freedom of action and of the will and usually connect it with moral responsibility (if someone didn't act freely, they are not morally responsible for their action).

# Freedom and Determinism

- Does humans act and decide freely?
- Is it logically possible that determinism is true and at the same time we are also free?

# Universals and particulars

- Universals, at least in their typical instances, are properties that characterize many things, or relations that characterize many groups of things.
- The basic question here is how it comes about that distinct objects are the same in some respect.
- Many philosophers consider that, in order to provide a satisfactory answer, we must accept that there are universals.
- Other deny the existence of such things. If, in the end, they exist, what is their nature?

# Possible worlds

- In contemporary philosophy, we often talk about possible worlds.

E.g. instead of saying it could have been that all people were happy, we say that, in some possible world, all people are happy.

- Are there possible worlds other than the actual one or is this only a picturesque way of saying what is possible and what impossible?
- If there are, are they entities of the same type as the actual world and outside of it or are they a kind of entities within the actual world?

# Events

It seems that, among other beings, there are also events: falls of objects, kicks, kisses, duels, etc.

- What kind of entity is an event?
- Under what conditions are an event  $x$  and an event  $y$  identical? According to one view, they are identical iff (that is, if and only if) they have the same causes and the same effects; according to another, they are identical iff they occur in the same time and space.

# Temporal parts

- We usually consider that material objects (like a ball or a mountain) have parts in space but not parts in time, and that is why a ball, for example, may exist in its totality (that is, all its parts may exist) during the whole time of its existence; it is processes, and not material objects, that have parts in time.
- The opposite view is that material objects, too, have parts in time, and that is why at no moment does a ball, for example, exist in its totality (since, at each moment, some of its temporal parts are missing). Which view is the right one?

# Personal identity

- If we have person **x** who exists at some moment **t**, and we also have a person **y** who exists at some later moment **t'**, under what conditions are **x** and **y** one and the same person?

E.g. If we could destroy **x**'s body, but simultaneously transfer all the information (memories, ideas, etc.) contained in their mind into the brain of a new, artificial body, would **x** continue to exist (with a new body) or would a new person be created?

# Philosophy of mind

- What sort of being is a mind?
- What sort of entities are mental states (e.g. pain, joy, beliefs) and mental events (e.g. decisions, inferences)?
- In particular, are mental states and events physical entities (e.g. chemical reactions in the brain)?
- The traditional dispute between materialists and their opponents has, in contemporary philosophy, been transferred into the philosophy of mind.

# Issues covered by contemporary metaphysics

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# Attempts to restrict metaphysics

- Hume's disposition to throw metaphysics books (or at least some of them) into the fire.
- Kant's criticism of the metaphysics of his time.
- Logical positivists' view that the sentences of metaphysics have no sense.

# Epistemology

- Epistemology discusses to what extent we know the things that (either in everyday life or in science) we believe we know, and to what extent we acquire knowledge by the methods (perception, induction, etc.) by which we believe we acquire knowledge.
- Similar is the question to what extent our beliefs of various kinds are justified (e.g. to what extent beliefs based on induction are justified).

# Epistemology

- Some of the methods by means of which we acquire, or allegedly acquire, knowledge are objects of study for both epistemology and sciences such as psychology and physiology. That is the case, for example, with perception and memory.

# Epistemology

The differences between epistemology and those sciences are two:

- On the one hand, psychology and physiology have no evaluative orientation and deal with how the relevant mechanisms function, whereas epistemology tries to evaluate whether the beliefs we form through those mechanisms constitute knowledge or at least are justified.
- On the other, psychology and physiology carry out empirical research, whereas epistemology (like all philosophy) is based on argument; one of the aims of epistemology is to evaluate the empirical kind of research too.

# Issues covered by contemporary epistemology

- Scepticism
- The concept of knowledge
- Justification of beliefs
- Perception
- Memory
- Introspection
- Induction
- A priori knowledge
- Naturalized epistemology

# Scepticism

- Scepticism denies or doubts that we have knowledge, or even that we have justified beliefs.
- In contemporary philosophy, sceptics are not real philosophers, but imaginary figures who often adopt extreme positions. But many real philosophers believe that we must find a way to provide a satisfactory answer to scepticism. How can this be done (if it can)?

# The concept of knowledge

- Epistemology distinguishes between various kinds of knowledge and focuses on propositional knowledge, that is, the knowledge we attribute to someone when we say “X knows that ...”.
- According to a definition that has existed since antiquity, X knows that p iff (a) X believes that p, (b) it is true that p, and (c) X’s belief that p is justified.
- Some decades ago, Gettier showed that definition to be incorrect, and one problem of epistemology since then has been to find a more accurate definition.

# Justification of beliefs

Under what conditions is a belief justified and not arbitrary?

Answers to that question generally fall under two categories:

- internalist answers, according to which the features that render a belief justified are to do with the subject's inner world.
- externalist answers, according to which the features that render a belief justified are to do with the relation between the subject's inner world and external reality.

# Perception

- One form of scepticism denies that our senses offer valid information about the world; so the question arises whether we acquire knowledge through our senses.
- Also, traditionally there was a dispute between realism, according to which the objects that the senses inform us about exist outside of the mind, and idealism (in one sense of the term “idealism”), according to which those objects are themselves mental representations.

# Perception

- More recent is the dispute between two forms of realism: the view that we perceive external objects through the intervention of mental representations and the view that we perceive them without such intervention.
- In addition, there is the problem of analysing the concept of perceiving.

# Memory

- How does memory differ from imagination?
- What conceptual distinctions can we make between different kinds of memory?
- Can we know something, later remember it, but at that time no longer know it?

# Introspection

- Introspection is the way in which we know what we ourselves believe, feel, etc.
- It seems that the beliefs we form by means of introspection about our current mental states are infallible. But is that so?
- Do those beliefs at least have a kind of validity that our beliefs about the external world lack?
- How does introspection function?

# Induction

- An inference is **inductive** when it moves from premisses about particular cases (e.g. emerald a is green, emerald b is green, etc. — where a, b, etc. are all the emeralds we have observed) to a broader universal conclusion (e.g. all emeralds are green).
- The traditional problem is to justify inductive inferences, at least those used in science.
- The so-called new problem is to distinguish systematically between acceptable inductive inferences and those that cannot be accepted.

# A priori knowledge

We know something a priori when our knowledge does not rely on empirical data.

- Is there a priori knowledge? It is usually thought that e.g. our knowledge of logic and mathematics is a priori. But philosophers like Quine question that view.
- If, in the end, we know some things a priori, what makes that knowledge possible?

# Naturalized epistemology

- According to a view held by Quine and others, epistemology must be reformed so as to be included in the framework of natural sciences. Indeed, according to a version of that view, all that must remain from epistemology is some questions tackled within the empirical sciences studying cognitive processes.

# Issues covered by contemporary epistemology

- Scepticism
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# Thought experiments

- When a branch of philosophy tries to define a concept, it often uses the method of **thought experiments**: we imagine a situation that is logically possible and wonder if the concept we are analysing would find application in that situation.

E.g. if the concept that interests us is freedom of action, we can imagine people who act as they desire but whose desires are all created by some scientists controlling their minds, and we can wonder if those people act freely.

# Thought experiments

- Yet thought experiments help us find out the logical relations between our concepts (which presupposes which);

E.g. we can see that freedom of action presupposes that the thoughts and desires leading the subject to the action have also been formed freely.

- We often have clear intuitions about whether the concept we are dealing with would find application in the situation presented by the thought experiment; the clearer our intuitions, the more convincing the thought experiment.
- The most interesting experiments are those convincingly supporting a proposition that *prima facie* appears to be false.

# Reflective equilibrium

- Also important to metaphysics and epistemology is **reflective equilibrium** between common sense and theoretical needs (that is, the need of a theory to have internal coherence and the need to give answers to as many questions falling within its area as possible).
- When we are constructing a philosophical theory, we achieve reflective equilibrium provided we diverge from common sense only to the extent that this significantly facilitates the satisfaction of theoretical needs. The idea here is that if we diverge from common sense beyond that extent (and so without adequate reason), then we decrease our theory's persuasiveness.

# Reflective equilibrium

- E.g. if we are constructing a theory about perception and, in the context of that theory, claim that there are no entities outside the minds of the subjects of perception, we should seriously consider whether the theoretical needs we satisfy through that claim justify such a divergence from common sense.
- At any rate, the requirement of adhering to reflective equilibrium doesn't mean that we ought always to agree with common sense; after all, common sense is not the same at all times.

# Occam's razor

- Metaphysics, when it tackles the question what kind of entities there are, often resorts to the so-called **Occam's razor**, that is, the principle that if two theories A and B are equally good in other respects, but B accepts the existence of more entities than A does, then A is preferable.
- As we say, A is “ontologically more economical”. The idea here is that B makes stronger assumptions than is needed.

# Occam's razor

E.g. all contemporary metaphysical theories accept that there are sets, in the sense of set theory in mathematics.

- So let's say we are facing the question how it comes about that distinct objects are the same in some respect. If theories A and B give equally satisfactory answers to that question, but B accepts that, apart from sets, there are also universals, while A countenances the existence of sets only, then A is preferred.
- Indeed, many philosophers distinguish between *quantitative economy* and *qualitative economy* and take both factors into account when comparing theories. A is quantitatively more economical than B iff B accepts the existence of more entities than A; A is qualitatively more economical than B iff B accepts the existence of more categories of entities than A.