

1. What is „ontological dualism“ in the study of the human mind? What are the problems of this approach?

The theory of Descartes states that there exists an ontological dualism between the human mind and the human body. He says that these two are different kind of entities which can be separated. Each of them can act independently without an influence on the other one. The mind can be characterized as a *res cogitans*, as a thinking thing. It exists only as a mental entity. Furthermore, it is indivisible in the sense that we speak of one mind which is willing, understanding or has a sensory perception. Additionally, we think ourselves as a whole which can't be divided. We perceive our mind as something which can't be separated into different parts. On the other hand, the body is a not-thinking entity and therefore of a different kind than the mind. Since the body does not share the same properties as the *res cogitans* it has made out of a different substance. However, Descartes adds some qualifications to his theory of dualism. The relation between the mind and the body is not like the one of a sailor and ship. The sailor just sees the damage which is caused on the ship but doesn't feel it himself. Therefore, he is not part of the ship but he is separated from it. If our body gets hurt, we feel the pain by ourselves. The sensations of hunger, thirst or pain can influence our mode of thinking so there has to be a connection. The body and the mind are intermingled and form a unit in these perceptions. The mind is however not affected by all parts of the body but by the brain as can be shown by the use of common sense. The manipulation of nerves can produce a phantom sensation like phantom pain. As a result, there has to be a causal connection between the mind and the brain.

Descartes' approach faces different problems which undermine its plausibility. For example, one can mention the case of Phineas Gage. The damage of a certain area of the brain leads to a different behaviour. One has to ask if this change is caused by the damage of a specific mental module or by the damage of a single, indivisible mind. It is more plausible to connect the decision making of Gage with a certain module which is responsible for social interactions. This case indicates that there is a causal connection between the correct function of certain brain areas and social behaviour. Therefore, one can conclude that the independence of the mind from the body is not plausible.

An achievement of Descartes is that he introduced a differentiated relationship between the body and the mind. He acknowledged a qualified dualism between these two entities which he showed by the different sensations we feel. If our hand gets in contact with fire, the hand gets burned and additionally we feel the pain by ourselves. Moreover, he introduced a representational theory of the mind. The representational theory of mind is about the relationship of external objects in the world and their perception by the human mind. As Descartes formulated it is not the object itself which is in our mind if we perceive certain feelings like heat or pain of a fire if we move close to it but a representation of a fire in our mind. There is some sort of sensory input which is processed by the human mind and leads to a certain representation of the object perceived, created by the internal resources of the human mind.

2. Mental causation, i.e. the causal effects of mental states of human beings, is regarded as a scientific problem. Please explain why with reference to a normative example of your choice

A mental state can be the reason to act in a certain way. E.g. we can accept the moral obligation not to kill X because it is against the moral value of human life. Thus, we wouldn't kill X though there are situations in which it is completely possible. A mental state can lead to a certain action. In our example it is the decision not to kill X though we are able to. Or we can even decide to protect X' life if it is endangered and we have the means to do so. But how can a mental state have physical effects? Mental states are qualitatively different than physical effects. Mental states are a subjective sensation whereby actions of our body are caused by effects which are subject to the law of physics. It is therefore difficult to grasp the connection between these different processes. In conclusion, we need a theory which can explain the relationship between mental states and social behaviour. One indication that there is causal chain is the case of Phineas Gage. His brain lesion caused a change in his mental states and in his social behaviour. Mental states are therefore responsible for different actions. Additionally, as can be shown by the analysis of the leaflets of "Weisse Rose" human conscience is a reality, a fact about human beings. It was some moral judgement which caused the authors of the leaflets to oppose against the Nazi Regime. This observation can lead to the assumption that human conscience is somehow connected with corresponding acting. The members of "Weisse Rose" felt a moral obligation to act against the injustice during the regimen of the Nazis and in conclusion spread the leaflets to display their opposition.

3. Why is descriptive adequacy a central methodological element of the study of the human mind? Please give an example.

Descriptive adequacy means describing a phenomenon properly. How (exactly) does a phenomenon look like? Relating to the topic of the course it means observing how moral judgements are made (What is their structure and content?). Only after defining what exactly we are examining is it possible to formulate an adequate explanation of a certain phenomenon.

The Kanisza-Triangle is a good example from sphere of vision: Subjectively we perceive the contours of two triangles. One of them seems also to be brighter than the other one. But objectively there are no full contours of two triangles and one isn't brighter than the other one. As a first step it is important to describe the empirical properties of mental phenomena. In a second step we can attempt to explain why we perceive the mentioned contours and colours.

The same method has to be applied when examining moral judgements. In the examples of considered judgements we tried to examine cases of altruism and justice in order to formulate principles that adequately describe empirical structures of moral cognition. Ultimately, without a proper description of moral judgements, their cognitive explanation lacks foundation and basis. It is a fallacy to draw conclusions about the features and appearance of a certain phenomenon without a careful description of the phenomenon.

4. Are there foundational principles of human moral judgement? What is their content and structure? Please explain with examples.

There are several aspects which can be outlined as basic principles of morality based on the analysis of considered judgments. First, moral evaluation depends on formal preconditions like agency and the differentiation between intended and foreseen effects regarding the subject of a certain action. The precondition of agency implies there has to be a human being which is the agent of a specific action.

Second, different possible properties of human moral cognition can be outlined such as the principles of altruism, justice and non-instrumentalisation or, as sometimes mentioned, the principle of double effect. For example the principle of altruism has the following preconditions: An action is morally good if the agent intends to foster the well-being of a person without regard to the own interests or the interest of a third party but for the sake of the interests of the patient of the action alone. Then again an action is not morally good if the intentions are bad, though the outcome is beneficial for another person. On the other hand, an action is not morally good, if the intention is good, although the result violates the interests of another person.

Justice means proportional equality between the reason for an action and the action itself according to a criterion of distribution that is reasonable for the sphere of distribution concerned (e.g. giving grades in relation to the performance in a test). If there is no criterion of distribution, objects of distribution have to be distributed equally (e.g. distributing a birthday cake in class).

These findings suggest that moral judgement depends on a structural analysis of a given situation, evidently principles of agency, intentions, causal effects etc.

Moral emotions play nevertheless a central role for moral judgement: They are for example a consequence of a moral evaluation, e.g. shame, contentment etc.

In addition, to know and understand the impact of an action on a person it may be necessary to understand the emotions of this other person like pain, fear etc. Empathy can reveal this impact as a heuristic tool.

Moral judgements have volitional consequences as well. This means that these judgements can affect the will of human beings. A person who perceives a certain situation can feel an “ought” to act in a certain way. This “ought” is some kind of motivation to do something but does not determine the volition and leaves a choice to make a certain decision. If an action is morally good, it can be obligatory and others have a right to this action or it can be just supererogatory with no right of others to this action. On the other hand, if an action is morally bad, it is prohibited and others have a right to that this action is not performed.

Moral judgement is thus not just based on an emotional appraisal of the situation, but on the cognitive principles.

Alternatively, as a contrast to the mentalist approach one can also mention the theory of emotivism to explain the principles of moral judgement. In that case one has to make clear that moral judgments are caused by subjective feelings and illustrate it on different examples.

<p>The problem of free will was not the focus of this question. However, a limited amount of points was still awarded for correct deliberations on the problem of free will.</p>
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5. Some authors argue that human beings naturally favour the members of the small group they belong to. This is so, they say, because of evolutionary factors like natural selection that produce a small-group morality. Please explain this view and its possible criticisms.

The idea of small-group morality is part of the theory of evolutionary psychology. Evolutionary psychology takes its foundation from natural selection and views it as the central factor of evolution. The qualities of beings are related to their genes. To ensure the survival and reproduction of those genes natural selection leads to the selection of only those genes that possess the highest reproductive fitness.

In a second step the theory further claims that an organism only acts beneficial to others if the being in question shares its genes, is closely enough related (its “kin”). In other words, organisms only perform acts of altruism to protect their genes (e.g. antelopes that sacrifice themselves to ensure the survival of their kin). And organisms only perform altruistic acts towards beings of their kin. The rationale behind acting in such a way (as the defenders of this theory claim) is to ensure the reproduction of the genes.

A number of students referred to the problem of small-group morality in the context of hunters and gatherers living together in small groups in caves. This was also accepted.
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Several problems arise:

Following this theory (reproduction as ultimate and only goal) organisms should only be in possession of those traits that benefit reproduction. However, organisms may possess other properties as well, e.g. non-adaptive mutations, adaptive mutations with non-adaptive side effects etc.

The theory further focuses only on natural selection and fails to recognize that other factors may be of great importance as well, e.g. certain development paths, architectural constraints or natural laws such as physics and chemistry.

Another problem is that it is problematic to base a theory of the mind on evolution and natural selection when important questions such as who the predecessors of human beings were, which cognitive capacities those predecessors possessed cannot be answered. Further human beings lack close relatives (i.e. beings that are closely related to them). The closest relatives of human beings are separated from them by 14 Mio years of development.

There is also the problem that less closely related organisms may have more properties in common than more closely related organisms.

Additionally, properties of organism can be of homologous and analogous structures. There are properties that have the same function but do not share the same evolutionary path.

The theory also lacks descriptive adequacy as it suffers from a functionalist fallacy. The theory claims that all traits must necessarily evolve in a way to further reproduction of the genes. For examples: evolutionary psychologists claim that men are promiscuous and women monogamous because such behaviour furthers the reproduction of genes and thus makes the

most evolutionary sense. However, this clearly does not adequately describe the reality and complexity of the relationships between sexes of many species, including humans.

Taking all these problems into account, it seems clear that evolutionary psychology is not the only possible approach to an evolutionary theory. There is in contrast a possibility of an evolutionary pluralism. In this evolutionary approach the theory of a universal moral grammar may well find its place.

6. Is neuroscience important for the law? Please give some concrete legal examples why it is important or why it is not.

The law is a creation of the human mind and the human mind is a product of brain functions. Understanding the human mind and its origins may help to understand aspects of the law.

The human mind formulates norms, applies norms and ascribes value to actions hence the legitimation, interpretation and application of the law depends on using certain moral principles. Neuroscience may offer answers to the question in which way moral principles are derived from structures of the human mind. A deeper understanding of the relationship between minds and moral principles and behaviour (and hence about perception, judgement, decision-making etc.) may aid, it is argued, the effort to increase the effectiveness, efficiency and justness of the law.

Another topic is the question about the freedom of will. It is necessary to determine if human beings are agents of their own actions or if these actions are just the product of causal connections, which lead to a certain result. The criminal law is based on the ideas of guilt and responsibility. If we would accept the theory that there is no free will, sanctions with the aim of prevention would be obsolete. The same is true for the private law: The main concept of private autonomy and the principle of *pacta sunt servanda* couldn't fulfil their purpose if we deny the possibility of free choices. Also in the sphere of human rights difficult problems arise. Human rights are about defending – among other ideals – freedom. If our will is not free, this does not seem to make sense.

Neuroscience may also play an important role – some claim – when it comes to forensic use. (e.g. techniques such as fMRI scans may provide answers to questions such as whether the defendant is lying or insane etc.). As these claims are – under scrutiny – not tenable, another important aspect of the theory of neuroscience and the law is to acquire the tools to criticise false assertions about the impact of neuroscience on the law.