



Solution (outline) Legal Theory – Fall Semester 2021

This solution is meant to provide a (rather extensive) outline of possible answers to the exam questions. Students are not expected to write such a detailed text; however, it is important to recognize the core elements of the questions and to accurately and coherently express one's thoughts and arguments.

Question 1 (30%)

Please explain the content of the “poverty of stimulus” argument. Please give an example from a cognitive domain other than morality, including the non-moral cognitive faculties of non-human animals. Why is this argument important for the understanding of human moral cognition?

Possible answer:

The debate surrounding “nature and nurture” and the existence and expression of innate capabilities and faculties has been reinvigorated with the rise of disciplines such as social and cognitive psychology, biology and linguistics in the second half of the 20th century.

To assess whether a certain trait, property or faculty is inborn, Chomsky framed the so-called “poverty of stimulus” argument. The poverty of stimulus argument holds that if a capacity cannot be acquired through experiential input (such as learning) alone, it must be inborn. This argument, however, does not imply that an inborn capacity must already be fully established at the time of birth – specific developmental triggers may very well be needed for a capacity/property to evolve into its mature form. The poverty of stimulus argument only posits the innateness of the disposition.

Examples *other* than morality, e.g.:

- *Example of bees*, i.e. their sense of orientation: Bees calculate the position of their food with reference to the position of the sun, the solar ephemeris, which is relative to time of the day (morning sun in the east, afternoon sun in the west). Their circadian inner clock and their orientation systems enable bees to determine the solar ephemeris and hence, the position of their food. In experimental settings, it has been shown that even bees lacking any experiential knowledge of the position of the morning sun were capable of correctly determining the position of their food. Namely, these bees were only exposed to the afternoon sun (in the west) but not the morning sun (in the east). It is therefore to be assumed that bees possess an inborn sense of orientation.
- *Example of vision*: The fact that we are seeing the triangles in the Kanisza Triangle example cannot be traced back to learning processes or prior experience. It appears that this perception is based on some inborn visual capacity.

These examples of the poverty of stimulus argument are relevant for the understanding of human moral cognition because they indicate that human cognition – as illustrated in these examples – is pre-structured. This insight is especially important as human morality and our moral knowledge appear to be vastly underdetermined by our experiences (cf. Universal Moral Grammar approach, question 3). There are thus reasons to assume that moral cognition is also based on certain innate cognitive structures. Such an assumption also provides a strong argument against the belief that morality is nothing but a cognitive illusion or socio-cultural construct.

Question 2 (20 %)

Moral evaluation is often associated with emotions. Please outline two different theoretical approaches to the role of emotions for moral judgement.

Possible answer:

The role and status of emotions in moral evaluation are central topics in moral philosophy since emotions are undeniably an important part of human morality and moral cognition. There are consequently many different approaches and views as regards their function and importance in moral evaluation.

One prominent theoretical approach to emotions is neuroethical emotivism, a strand of moral non-cognitivism in the tradition of meta-ethical emotivism.



Neuroethical emotivism views moral judgments essentially as emotional reactions/expressions of aversion or appraisal (e.g. “This is just” = “I like it”). These emotional reactions are additionally said to be hard-wired in our brain structures that are evolutionary adaptations aimed at strengthening one’s reproductive (in-)group fitness. From a neuroethical emotivist standpoint, morality’s function primarily consists in facilitating and enabling a certain form of social cooperation. Moral judgments and their claims of reasonableness are consequently regarded as nothing but post-hoc rationalizations and not actual products of reason. The core assumptions of neuroethical emotivism are thus based on neuroimaging studies and evolutionary theory.

Most often referred to is the purported connection between the increased activity in certain parts of the brain and the moral judgments they correlate with. Brain parts that are associated with emotional processing (especially the ventromedial prefrontal cortex, VMPFC) display an increased activity when deontic judgments are made, and vice versa, there is heightened activity in brain areas that are more associated with rational and deliberate decision-making (such as the dorsolateral prefrontal cortex, DLPFC) when utilitarian judgments are being made. In addition, neuroethical emotivism is explicitly biased towards utilitarian judgments, which are deemed morally superior, as they are believed to involve more deliberate cognition and are therefore more “rational”. In contrast, deontic judgments are viewed as quick emotional responses and therefore “irrational”.

In this context, one may further discuss and evaluate neuroethical emotivism along following lines/examples:

- Dual system/process model
- Trolley problem/Footbridge problem
- Roadside dilemma/Third world dilemma

Yet, there are some important points of criticism: Neuroethical emotivism turns out to be somewhat self-contradicting if one considers the underlying premises of utilitarianism, namely the equality of all human beings and the principle of equal treatment. These normative preconditions cannot be justified by utilitarianism itself as they are non-consequentialist and deontic. Thus, one may have to either concede that (1) utilitarian judgments are equally emotional as deontic judgments and therefore not some sort of superior alternative to fast irrational deontic judgments, or that (2) they are rational, but then deontic judgments, too, would have to be deemed rational as they also underlie the principle of equality. In both cases, the theory leads to internal contradictions.

Some further caveats include methodological concerns such as the theory-dependence of data interpretation (cf. Knobe effect), the problem of reverse inference and, in general, the replicability and validity of empirical studies – an issue of great relevance that has variously been called “replication crisis”, as so-called follow-up studies often have contradicting results. Moreover, neuroethical emotivism is analytically unclear: moral judgments are not reducible to mere emotional reactions to some morally relevant situations.

An alternative approach to emotions in moral cognition is a mentalist theory of morality. It holds that a moral judgment is based on an elaborate adequate description of a morally relevant situation. The structural analysis includes the assessment of formal preconditions of moral evaluation: of the agent, her intentions, the consequences, means and side-effects of her actions. Such a structural assessment follows moral principles like justice, proportionality, altruism and the principle of non-instrumentalization. As these guiding principles are of cognitive character, moral judgements also have cognitive content.

Therefore, emotional reactions are more likely to depend on prior moral evaluation than the other way around. E.g. Person A feels angry because a relation of equality was violated in situation B. Emotions are hence the products of moral evaluation (e.g. pride, shame) and can be used as a heuristic tool (e.g. empathy), enabling an agent to understand what her actions might imply for others. Moral emotions constitute a particular set of emotions, they are *sui generis*.

Moral judgements also lead to volitional consequences: they affect the will of agents by establishing an obligation – they show how a specific situation, compared to the status quo, ought to be. At the same time, they do not determine actions, as the ability to freely choose between options is not eradicated. If an act is morally good, its performance is obligatory or supererogatory, i.e. morally laudable but not obligatory. If an action is just, its performance is obligatory. If an act is morally bad, it is prohibited to perform it. If an act is morally neutral, the agent may freely choose whether she wants to perform it or not.

Finally, it might also be instructive to consider the wide practical consequences of both approaches to emotions in moral evaluations. Whereas neuroethical emotivism is closely linked to a radical human rights skepticism which delegitimizes the foundation of moral (and legal) principles by reference to moral (cognitive) psychology, a mentalist approach could buttress the legitimacy and rationality of moral principles.



Question 3 (30 %)

What speaks for, what against, a “Universal Moral Grammar”?

Possible answer:

The *Universal Moral Grammar* (UMG) approach is an explanatory theory of human moral cognition that asserts a set of inborn, universal and uniform (across the species) principles that generate an infinite number of moral judgements. Such foundational principles are e.g. justice and altruism.

The idea of a UMG was sparked by Chomsky’s theory of universal grammar of language (also called “generative grammar”). Chomsky’s theory is based on the assumption that there is an inborn cognitive structure, i.e. a system of rules and principles, which generates languages, the language faculty. Evidence for the existence of such a language faculty is provided by cases of brain lesion or so-called second-generation effects in the course of linguistic creolization where a more complex language is developed.

From a methodological standpoint, UMG, like the generative grammar approach in linguistics, starts its inquiry with the empirical task of establishing an adequate description of the phenomenon of moral cognition.

Crucial for the theory is hence the *poverty of stimulus*¹ argument and the realization that our moral knowledge is vastly underdetermined by human experience. E.g. the complex volitional consequences of moral judgments like the meaning of an “Ought” or rights and duties are not explicitly taught to children – nevertheless, they are able to differentiate between moral and conventional norms from a very young age. It is therefore not plausible to conclude that all these complex findings are learned in the traditional sense, e.g. through parental/social instruction or historically/culturally grown rules. UMG’s assumption of an inborn moral faculty therefore implies that there are certain innate cognitive preconditions for the normative construction of normative systems, including the law.

The nevertheless existing variety of moral judgments by human beings can be explained by various facts: First, the distinction between competence and performance can explain different results due to memory capacity, distraction or shift of attention. Second, judgments can be biased by emotions or interests. Third, there could be a lack of awareness of all facts of the case. Fourth, there is a possibility of competing values, which could have an influence on the result. The empirical variety is thus no disproof of a universal moral grammar.

Points of criticism: First, one could question the analogous construction of a theory of morality and theory of language. It is important to reflect on the productive extent of such a theoretical legacy that comes with an analogy.

From a dual process perspective, it could e.g. be criticized that UMG ascribes a different role to emotions in moral cognition and has a different descriptive account of concrete moral principles (cf. the interpretation and analysis of the trolley cases) and moral concepts.

Also, one could also argue that UMG is – in one way or another – confronted with the question of *naturalistic fallacy*. The problem of naturalistic fallacy typically arises if a (normative) theory seeks to operate with (any kind of) empirical assumptions and data: i.e., when a conclusion from “is” to “ought” is drawn. Apart from the problematic nature of this kind of inference, a main concern is that not everything “natural” must necessarily be morally good – one may think of the “naturalness of aggression”.

However, there is a priori no naturalistic fallacy if we consider new empirical insights about the structure of the human mind to be relevant for a theory of morality. *Being part* of the structure of human mind does not yet *normatively justify* such substantive principles. Justification presupposes normative theory. (This is exactly where Greene’s theory could be argued to fall short.)

Presupposing such a normative theory, and from a view of constructive scepticism, it could then actually be reasonable to assume their legitimacy as long as there are no valid, principled objections against them. While such principles can figure as foundational starting points, additional constructive work by

¹ C.f. also question 1



normative theory is required in order to arrive at concrete formulations and interpretations of moral and legal norms.

In summary, UMG's attempt at an interdisciplinary approach to moral cognition constitutes a very ambitious and novel project, as it seeks to critically reflect and integrate new empirical (i.e. neuroscientific) knowledge into our traditional understanding and reflection of moral theory and moral judgments. UMG's distinct outlook touches on the very foundations of human morality, decision-making and thinking.

Question 4 (20 %)

What is “evolutionary psychology”? What assumptions about the forces that shape the evolution of organism are crucial for this theoretical approach? Does it explain convincingly the evolution of moral cognition? Which alternative approaches to the evolution of moral cognition do you know?

Possible answer:

The main focus of evolutionary theory lies on natural selection, namely the hypothesis that properties of an organism derive from certain genes; genes with the highest reproductive inclusive fitness are evolutionarily favoured, and organisms are said to only possess so-called adaptive traits (thesis of *adaptationism*).

Accordingly, evolutionary psychology, a sub-category of evolutionary theory, seeks to identify certain social behavioural patterns as a product of evolution. Its underlying normative assumption is that it would be evolutionarily useful to engage in a special kind social cooperation, namely the care for relatives, for the ultimate goal of reproduction. *Small group morality* and altruism towards one's kin are therefore ways to augment the chances of survival of one's genes, even if the primary bearer should die. This is the core of the idea of *kin selection*. Thus, the perceived tension between humankind's selfishness and (small group) moral behaviour is resolved.

The explanatory power of evolutionary psychology is particularly limited with regard to the *evolution of cognition*, and hence moral cognition, too. Distant relatives may have more in common with a particular species than more closely related organisms. Often, there are certain traits which derive from a common ancestor, but are dissimilar in their functionality (homologous structures) or which are functionally similar just because of comparable environmental requirements (analogous structures). Moreover, it is unclear who the exact predecessors of human beings were and how their mental capacities can be classified; furthermore, human beings lack close living evolutionary relatives. These problems are particularly pertinent for cognitive abilities because their exercise does not leave any material trails. There are e.g. no artefacts that could document the linguistic abilities of early human beings.

Another important point of criticism of evolutionary psychology concerns its proneness to committing the so-called *functionalist fallacy*: argumentatively jumping from the adaptive function of a trait to the conclusion that an organism must in fact possess that trait. Consequently, it overlooks that one has to establish first what properties an organism indeed possesses (descriptive adequacy). Only after having established these properties (and it may be questioned what, if any, ethical principles of humans can plausibly be taken to be inborn), one can try to explain how these properties evolved. An example of a functionalist fallacy could be seen in the argument that “morality evolved for cooperation”.

However, there are some influential *alternative* approaches in evolutionary theory. Natural selection is not the only factor influencing evolutionary processes. Some of the existing traits do apparently not increase the chance of reproduction of genes. There are non-adaptive mutations and adaptive mutations with non-adaptive side effects. Likewise, there are not only micro-mutations but also rapid changes are possible where small genetic changes may have far-reaching effects, c.f. the evolution of the eye. Also, exaptation, i.e. the co-option of existing traits for a new function, may underlie certain traits. Furthermore, evolution depends on other factors, such as architectural constraints, certain development paths or natural laws.

Finally, it seems more plausible to assume a theory of *evolutionary pluralism* underlying the evolutionary development of organisms and to acknowledge the stochastic, non-deterministic nature of the evolutionary process. Within such a theory and in light of the above considerations, a wide array of possibilities exist, how human cognition can be structured. This includes the possibility of a human moral faculty that underlies principles of justice and altruism.