

Ethics, Psychology, and Neuroscience as Complementary Disciplines

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Moral behavior has traditionally been discussed as a topic in the disciplines of ethics and the social sciences. In recent years, researchers in neurobiology and cognitive psychology have discovered this field as part of their pursuit of social neuroscience. Research projects in neuroscience and psychology have emerged that focus on social cognition and social interaction in humans.

Moral behavior may be regarded as a subtype of social behavior. Behavior in general is dependent on genetic, molecular, pharmacological, and psychological factors, among others. In order to understand behavioral patterns better by scientific means, it is therefore worthwhile to study the biological basis for behavior, including the biological determinants for social and moral behavior. Biological foundations, particularly in the realm of neurobiology, shape human and animal behavior. Neuromedicine and neuroscience aim at explaining human behavior as a product of brain processes and functions. The following examples illustrate how the biological basis for social and moral behavior has been investigated in medicine, biology, neuroscience, and psychology over the last years and decades:

1. Medicine: brain lesions and associated changes in behavior
2. Medicine: drugs, interventions, and therapies that alter behavior, e.g. deep brain stimulation
3. Biology: genetic determinants of aggression
4. Biology: comparisons of social interactions between humans and primates
5. Social neuroscience and psychology: empathy, e.g. based on the mirror-neuron system
6. Psychology: psychology of moral development

Ethics, social neuroscience, and cognitive and moral psychology possess their specific aims, interests, and strengths, a fact that makes it unlikely that one will supersede or replace one of the others in future years:

Researchers from social neuroscience and psychology pursue empirical questions with scientific methods. They are bound to the quality criteria that have been developed in psychological research, i.e. objectivity, reliability, and validity. Neuroscientific research aims at testing hypotheses about behavior empirically. It should take into account theories about behavior that stem from philosophical reflection. In particular, brain researchers will most likely want to widen their studies to include moral reasoning, should corresponding empirical techniques become available.

On the other hand, ethicists and philosophers specializing in ethics frequently aim at classifying arguments regarding a problem and making them transparent, before weighing them and reaching a conclusion. The ethical issues often affect groups of humans and therefore possess social and political importance. Such questions cannot be solved by empirical and descriptive studies of individual human behavior. Still, philosophy may be informed by empirical data about how humans act and decide, for example with regard to new philosophical theories of behavior.

Philosophical ethics is often concerned with questions about the relative value of ethics theories that are applied to social and political issues. The moral behavior that the individual shows is almost neglected in this framework because it often appears as contingent and fragile. Nevertheless, a purely theoretical perspective would disregard the informative empirical aspects of moral behavior, which is a topic of systematic scientific investigation in social neuroscience and psychology.

In summary, it may be beneficial for proponents of ethics, social neuroscience, and cognitive and moral psychology alike to enter into even more intensive interdisciplinary interactions and discourses about moral behavior.