

What Philosophy of Mind Will Bring to Ethics

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Abstract

In this paper, I mainly discuss one relationship between philosophy of mind and ethics, dealing with the concrete example of animal ethics. First, I will examine a recent proposal by Martha Farah, who claimed that we can infer a mental state by observing a brain state. Second, I will criticize her conclusion for several reasons from a functionalist point of view. Third, I will discuss the possibility that neuroscience might reveal that animal mentality is so different from our mentality that it cannot be easily compared to ours. Finally, I will imply the possibility that, because of this difference, we might have to revise ethics when we try to apply it to animals.

Introduction: Ethics and Philosophy of Mind

A common idea is that the mental capacity of an individual determines its moral status, at least partly. In *Practical Ethics*, Peter Singer writes, “the limit of sentience [...] is the only defensible boundary of concern for the interests of others” (Singer 1993, Chapter 3). Peter Singer is a famous utilitarian, who promotes ethical treatment toward nonhuman animals. According to him, we have to care for all those who have a capacity to sense; and since nonhuman animals are sensible, we have to care for them as well. A capacity to sense is undoubtedly one kind of mental capacity, and whether or not an individual has the capacity to sense is a question for the philosophy of mind.

There are other examples that demonstrate how ethical theories require philosophy of mind. Kant, the originator of deontology, thought that our moral duties are restricted to rational beings. John Rawls, a famous modern contractualist, mentioned having moral personality as a sufficient condition for being entitled to equal justice (Rawls 1971, Chapter VIII, section 77). Rawls said a moral person has two features. First, a moral person is capable of having a conception of their good, and second, a moral person is capable of having a sense of justice. Even though these capacities are not as concrete as sensibility, rationality is a sort of mental capacity regardless of the specific kind of rationality in question, be it mathematical, inductive, practical, and so on. On the other hand, the capacity to be a moral person is considered to be the capacity to respond to the moral appeals of others. And this seems to require a higher cognitive capacity. As you can see from these examples,

ethics requires philosophy of mind. In order to answer ethical questions, we have to answer philosophical questions about mental capacities.

The structure of this paper will be as follows. In section 1 I will introduce two problems about determining the mental capacities of individuals. Recently, Martha J. Farah wrote about this topic (Farah 2008). I will summarize Farah's view in section 2. I will argue that her suggestion is partly right, yet that her argument contains some problems. I will present two objections to Farah in section 3. Finally, in section 4, I will develop my assessment of the influence of science and philosophy of mind on ethics. I think that the emerging science of mind might reveal that nonhuman mental states are different from ours. It might suggest that we need to revise our ethical theories or invent new ones, because our current ethical theories are based merely on a daily understanding of our mental capacity.

1 Two Problems about Determining Mental Capacities

In this section, I will pose two philosophical problems about determining the mental capacities of individuals; two problems that we must solve in order to solve ethical problems. Let me begin with an example. When you consider refraining from eating sensible creatures, you have to find which animals are sensible and which are not. In order to draw such a line in the natural world, you have to answer two apparently distinct questions.

First question: What is it to have a capacity to sense?

Second question: How can we know that an individual has a capacity to sense?

The first problem, "what is it to have a capacity to sense", can be called the metaphysical problem of mind. We need a theory about the nature of mind. There are a number of answers to this problem: dualism, behaviorism, physicalism, and functionalism. In dualism, there are two kinds of substances: the mental and the physical substance, which are not reducible to one another. The other approaches to the problem are classified as physicalistic monism¹. Behaviorism insists that mental states are identical with behavioral dispositions. Physicalism claims that a mental state is identical with a brain state. And according to functionalism, mental states are constituted by causal relations to other mental states and to sensory inputs and behavioral outputs. Each one of these approaches presents a different difficulty. Currently, functionalism is the dominant position in philosophy and cognitive science. Therefore, in this paper I will adopt functionalism as the default answer to the metaphysical problem, without making the argument for it.

The second problem, "How can we know that an individual has a capacity to sense?", can be called the epistemological problem. This is the problem of how we come to know other minds. Surely, these two problems are not independent from each other. Rather, you have to answer the metaphysical problem before you move on to the epistemological problem. In this paper I will mainly focus on the epistemological problem.

¹ Actually, functionalism is compatible with dualism, even though functionalism is classified as a kind of physicalistic monism. A functional state can be realized by a silicon-based computer as well as by a mental substance. Yet most versions of functionalism are classified as monism, and hence I too will regard it as such.

2 Farah's Argument

I would now like to discuss Martha J. Farah's recent work on these topics. It is remarkable that she was not interested in these theoretical issues but rather in pragmatic issues. She asks what is the appropriate care for severely brain-impaired patients who lost the capacity for intentional communication, as well as for nonhuman animals who lack language. I will only deal with the case of nonhuman animals in this paper, but the same point can be made for the case of brain-impaired patients. Farah suggested an epistemological improvement for knowing the mental capacities of an individual. According to her, if we adopt an identity theory between a mental state and a brain state for the metaphysical problem, brain activity becomes good evidence for inferring mental life.

Farah claimed that we ordinarily infer other individuals' mental states from observable behavioral evidence. We know the relationships between physical events and mental events in ourselves. Then we assume that the same relations exist in others. For example, when I feel pain, I make a grimace. When I see another person is making a grimace, I infer that she is feeling pain.

But Farah claims that this inference is only an analogy, because the relation between behavior and mental state is merely contingent. Hence she writes that "behavioral inferences to mental state seem fraught with uncertainty". A person making a grimace in front of you may only be imitating, or she might be a robot. There are also highly pragmatic issues concerning this point: we are quite uncertain about the mental states of nonhuman animals. For example, some say dogs and cats can feel happiness, but others criticize this idea, saying that it is only a naïve anthropomorphic attitude toward animals.

To solve this predicament, Farah made use of identity theories. Identity theories are physicalistic theories, which state that a mental state is noncontingently identical with a brain state. Hence, according to Farah, we can know one's mental state by observing activity of particular brain area.

We have two versions of identity theory: type identity theory and token identity theory. What are types and tokens? Consider the string of letters "TOKYO". It contains four types of alphabets ("T", "O", "K", and "Y") and five tokens ("T", "O", "K", "Y", and "O"). The second "O" and the fifth "O" appearing in the string belong to same type, but they are different tokens. The type identity theory maintains that a mental state type is identical with a brain state type. For instance, every instance which has a property of being in pain essentially has a property of being in brain state *B*. On the other hand, the weaker version of identity theory, the token identity theory, maintains that any token of mental states is identical with a physical state (for example, a brain state), but there can be different tokens of the same mental state type that do not share physical properties with each other. For example, every pain state is some physical state, however, it might be the case that a human pain state is brain state *B*, a squid's pain state is its brain state *B'*, and a robot's pain state is the electrical state *E*. Token identity theories admit that pain states can differ in their physical characters.

One of the widely accepted views that is compatible with token identity theory is functionalism. As I mentioned above, I adopt functionalism, although Farah did not endorse a particular version of identity theory. Both identity theories claim that a mental state is noncontingently identical with a brain state and hence, according to Farah, we can know one's mental state by observing the activation of a particular brain area. Evidence from neuroscience is qualitatively different from behavioral evidence.

Farah took pain as an example. According to her, we can judge whether an individual is in ethically meaningful pain, if we observe the activity of the Anterior Cingulate Cortex (hereafter, ACC). Cognitive neuroscience has recently revealed that our pains are made up of components of “mere” pain and of psychologically distressful pain. A piece of evidence supporting this hypothesis is when morphine is administered to patients who once suffered from severe pain. These patients report that they feel the same pain, but it does not bother them after the administration of morphine. In daily life, pain is always distressful, but this evidence shows that pain and distressfulness are in fact dissociable. This also implies that “mere” pain and psychologically distressed pain have different neural bases, because morphine mainly affects activity in ACC. Thus, psychologically distressful pain is considered to be associated with the ACC. There is much evidence supporting this hypothesis², but unfortunately I do not have the time to mention them here. Given that only psychologically distressful pains are ethically important, we can know whether one is suffering ethically meaningful pain by checking activation of the ACC.

So far, there seems to be no problem. But when it comes to pains of nonhuman animals, a plain question emerges: does the ACC of nonhuman animals function the same way as that of humans? Farah dealt with this question, but she did not give a clear-cut answer. Citing some claims by neuroscientists, she postulated that if brain states are similar between humans and nonhumans, then mental states are similar as well. This is a highly dubious claim, and I will handle it in the next section.

To sum up, Farah suggested an alternative solution for ethical problems. According to her, when we think about other minds, we make “unreliable” inferences from behavior. She proposed that brain activity is a more reliable indication of mental life thanks to its non-contingent relation between brain states and mental states.

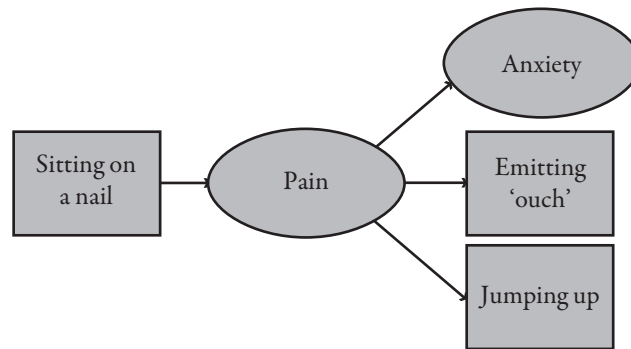
3 Two Objections to Farah

In this section, I would like to present two objections to Farah from a functionalist standpoint, which are related to each other.

Before moving on to the criticism, let me briefly explain functionalism. According to functionalism, a mental state is defined in terms of its function: causal relations to other mental states and to sensory inputs and behavioral outputs. For example, suppose pain is a mental state as follows: sitting on a nail causes pain and pain causes anxiety, emitting ‘ouch’ and jumping up. This will give us a theory of pain. Pain is characterized in terms of other mental states (anxiety), sensory inputs (sitting on a nail) and behavioral outputs (emitting ‘ouch’ and jumping up) (See also Fig.1). In a more symbolized fashion, pain can be defined as follows:

Being in pain = Being an x such that [sitting on a nail causes P and P causes both anxiety and emitting ‘ouch’ and jumping up and x is in P]

² For such evidence see, for example, Carruthers 2005 and Damasio 2000.



(Fig. 1)

Normally, functionalists consider mental states to be identical with brain states, and therefore most functionalists are also identity theorists. In this paper I will also adopt the position of functionalism plus identity theory.

Now, let us return to our critical discussion of Farah. First, observing only one brain activation does not make sense. As we can see from the above example, although pain is identical with a brain state, pain is defined in reference to other mental states, inputs and outputs. In order to know the meaning of the brain activation in a certain brain area, we have to investigate the functional structure between this and other mental states, sensory inputs, and behavioral outputs.

Second, in the functionalist picture, observable behavior also plays a definitive role in mental states. It contributes to the meanings of mental states. Hence evidence from brain activity is *not* qualitatively different from evidence from behavior. In the above example, sitting on a nail and emitting 'ouch' play definitive roles in pain. The reason why we cannot be sure about nonhuman animals' mental states solely in light of behavioral evidence is not owing to its quality as evidence, but rather to our lack of knowledge about the functional construction of animals.

These criticisms have an undesirable implication for the discussion of animals' mental capacities. The problem is this: even if we could get the whole functional structure of nonhuman animals, we might still be uncertain about the meaning of their mental states, in case there is a large difference between our functional construction and theirs. For example, some philosophers claim that the capacity to have conscious mental states requires the capacity to make thoughts about thoughts (Higher Order Thoughts)³. In this case, most nonhuman animals cannot have conscious mental states, owing to the fact that they cannot form Higher Order Thoughts. This raises the question, are states which are always unconscious and hence lack a phenomenological aspect still pains? Traditionally, philosophers have answered in the negative.

The result is that simple ACC activation shows nothing. To say that ACC activation is relevant to ethics, we have to make functional construction explicit. My conclusion is rather opposite to Farah. Newly acquired evidence from neuroscience might make us unsure about nonhuman animals' mental capacities. This conclusion seems threatening to animal ethics, and I will discuss the solution to this problem in the next and concluding section.

³ For example, Carruthers 2000 and Rosenthal 1997. But Rosenthal does not deny animal consciousness.

4 Conclusion and Implications: What Neuroscience Will Bring to Ethics

In the last section, I pointed out that we might be unconvinced of the meaning of mental states of nonhuman animals if we find that there is a difference between our functional architecture of mental states and that of nonhuman animals. In fact, the key to this crux has already appeared in section 2. In that section, I mentioned the distinction between the physical and psychological dimensions of pain, a distinction which was not so common before the development of neurocognitive science. This new distinction was created in order to fit empirical evidence.

Before the age of cognitive science, our mental states were exclusively analyzed by introspection. But cognitive science radically changed this situation. It extended the mind to the region outside of consciousness. For example, the notions of unconscious desire, perception, and thought became common these days. We invented new concepts for new kinds of mental states which were discovered by empirical investigation.

Therefore, we need to invent or reform our concepts of morally relevant mental capacities. This also implies a revision of moral theories which are partly based on mental capacities because current ethical theories are based on folk understanding of our mental states. For example, when Singer discussed the suffering of animals in the book I quoted, he handled “suffer”, “feel pain” and “sense” as near synonyms. This is not unnatural in terms of our daily understanding of the mental, but there are some problems in light of recent cognitive studies.

First, we saw there is pain without suffering. Since having pain does not always entail suffering, we have to evaluate whether pain of nonhuman animals amounts to suffering. Second, as I mentioned above, some philosophers insist that nonhuman animals incapable of higher order thoughts do not have conscious states. If they are right, should a subject having nonconscious pain receive ethical treatment⁴?

These problems should lead us to a reformation of our ethical theories. Not only do we have to base them on sophisticated concepts of mental capacities which are available for empirical investigations, we might also have to reconsider our ethical theories at large. For example, whether we conclude that a subject of nonconscious pain should be treated ethically or not, the decision implicates a change to our concepts of harm and care. Suppose that we would decide that we should care for such subjects. Then this decision tears the strong bond between psychological harm and care that is held by many, because nonconscious pain does not psychologically harm the subject of the pain. Ethical concepts and mental concepts are so entangled that they cannot be easily separated, and therefore we might have to reconsider ethical theories from the basics.

My point is not to deny ethical treatment toward animals. What I want to argue is only that we need to reexamine ethical ideas based on more fine-grained categories of the mind, in order to care appropriately for nonhuman animals. This would call for a reformulation of our basic ethical concepts.

In this paper, I mainly discussed the relation between philosophy of mind, cognitive science and ethics. Although Farah argued that we can know a nonhuman animal’s mind if we peer into its brain, I argued against her opinion, mentioning the possibility that neuroscience might reveal that animal mentality is so different from ours that it cannot be easily compared to ours. Therefore, it

⁴ Carruthers presented this problem in Carruthers, 2005.

might be very difficult for us to interpret animal mental states. Finally, I implied that it is very likely we need to revise some of our basic ethical ideas based on our new understanding of the mind.

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