### ID: 212 / Panel session IV.03: 1

## Paper as part of a panel session

Topics: - bio / medical ethics, - animal ethics

Keywords: animal experiments, animal ethics, philosophy of animal minds

# Is animal pain and suffering comparable to human suffering? The role of cognitive complexity in suffering.

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Many animal ethical theories start from the view that equal interests should be given equal consideration. Moreover, it is argued that most animals have an equal interest in avoiding pain and suffering to humans. For this reason, these animal ethicists call for the abolition or reduction of animal experiments. The underlying assumption is that animal and human pain and suffering are comparable.

The practice of animal experimentation, on the other hand, is often defended on the basis of the view that animal and human pain and suffering are not comparable. Animals are used instead of humans exactly because they cannot suffer in the same way as humans. At the same time, animals that most resemble humans enjoy a privileged status (both in the law and in the practice of animal experimentation committees), because they are thought to suffer more from experiments (think of primates in solitary confinement).

The assumption in practice seems twofold: (1) human and animal suffering are comparable, but animals simply suffer less, and therefore it is warranted to use animals, and (2) certain animal species suffer less than others. Using a rat is regarded as less problematic than using a primate, and using a zebrafish is regarded as less problematic than a rat. One of the reasons for holding this view is that they are considered to have less complex cognition.

I will examine the following questions: What does it mean to say that animal and human pain and suffering are (not) comparable? And what does it mean to say that an animal suffers, as opposed to simply that it experiences pain? Does cognitive complexity make pain and suffering worse?

## Comparability

Biologists and animal ethicists base the idea that there are relevant experiential similarities between humans and other animals on the analogy postulate, first proposed by Romanes (1882): If certain animals have similar capacities involved in the experience of pain and suffering as humans, we can assume that these animals also experience pain and suffering. We can tell whether they have similar capacities if animals respond with similar behaviour to certain stimuli as humans, and if their physiology (nervous system) is similar in the relevant respects.

The risk of relying on the analogy postulate is that it is open to the objection that next to analogies disanalogies exist between humans and animals (Allen, 2011). It could be argued that human and animal experiences are simply not comparable. The underlying assumption is that because of their different physical and mental make-up and because of the different environmental pressures through which they evolved, humans and animals experience the world differently. Such criticism of the analogy postulate can be dispelled if a theoretical underpinning can be given for why certain similarities are relevant (Allen, 2011).

While, as will be argued, the analogy postulate gives us good reasons to assume that animals with similar behaviour and nervous system as humans can have similar experiences – and the precautionary principle requires us to believe that they do – we should be careful not to conclude that those animals that do not exhibit these similarities therefore do not have similar experiences as humans. There are two reasons to be cautious of drawing hasty conclusions: Firstly, we are so different from some animals that we have difficulty relating to them and we may not be able to interpret their behaviour appropriately. Secondly, the fact that some animals do not have brain structures similar to those of humans does not mean that these animals do not have different brain structures that have the same function.

Does cognitive complexity make pain and suffering worse?

Pain experience depends on intensity, frequency, and duration of the painful stimuli, as well as an animal's propensity for pain, and it is determined by an animal's response to pain, which is influenced by cognitive processes such as focusing, distraction, ability to cope, beliefs about pain, and amount of control over the situation. As Yeates (2011) explains, it is far from self-evident that more complexity leads to more pain. For example, more cognitively complex animals can in some cases cope better with pain, if the pain is short and the animals realize the pain will be over quickly. On the other hand, if they realize the pain is chronic, they could cope less well, because they know the pain will continue.

Pain experience is only one aspect of suffering. Suffering also – perhaps even more urgently – has to do with the frustration of one's goals and there are forms of suffering that are not experienced as pain sensations, but rather as adverse mental states. As suffering seems to involve cognitive processes to a great extent, it seems likely that cognitive complexity makes suffering worse. Is this view warranted? There are types of fear, anxiety or paranoia that animals likely don't experience, because they require abstract concepts. Animals don't have existential anxiety as they have no concept of death and do not wonder what the meaning of their life is. Also, states like depression have a social character for humans; it may be exacerbated by the social stigma attached to it. It is likely that animals experience emotions, such as fear, grief and sadness, in a primitive way. This could mean that they suffer less on certain occasions, for example because they may have a shorter memory span and will therefore grieve for a shorter period of time. On the other hand, undirected primordial negative feelings can also be very overwhelming, if the animals cannot put these feelings into perspective and cannot learn to cope with them in the long run, as human beings can. I therefore deem it problematic to assume that less cognitively complex animals experience less suffering than more complex beings across the board.