

Animals Suffer too – A response to Akhtar's "Animal Pain and Welfare: Can Pain Sometimes Be Worse for Them than for Us?"

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Running head: Animals suffer too

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Abstract

In her chapter Akhtar (2011) suggests that animals experience worse physical pain than humans because they are not endowed with self-consciousness and with consciousness of the passage of time. In this article I dispute this idea. I develop here a fear/pain criterion of rational behavior that reveals that rats do behave rationally, whereas, humans in many cases do not. A human applies his ^{or her} high intellectual capability in such a way that at times it increases ~~his~~ suffering and at times decreases it. XX

Keywords: pain and fear, suffering in humans and animals, rationality 

can you name it? your approach?

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Two Approaches to Pain and Suffering in Humans and in Animals

Who feels greater pain and who suffers more, humans or animals? Sahar Akhtar (2011) develops her approach to pain and suffering in animals and humans against the approach that opposes hers. First I shall review briefly the ~~same~~ approach; then I shall describe Akhtar's approach; and finally I shall offer my own approach, based primarily on observations and laboratory experiments.

contradictory

round-about - state the approach more directly.

By the "decreasing approach" (which opposes Akhtar's), I maintain that animals experience pain and suffering to a lesser degree than humans because they do not have self-awareness and awareness of the passage of time. This approach posits that animals (e.g., mice, rats, cats, dogs, monkeys) feel consciously the experience of the physical pain, but are not endowed with a capacity for self-awareness (e.g., awareness of the awareness of pain) or the ability to understand the passage of time (e.g., future expectation). The decreasing approach also distinguishes the sense of physical pain (e.g., an electric shock on hand or foot) from a feeling of suffering connected with pain, a feeling based on the activity of "higher-processes," that is, higher cognitive and consciousness processes such as passage of time and self-

repetitious - combine

~~awareness~~. For example, a person terminally ill with cancer feels the severe physical pain of the cancer but in addition experiences suffering arising from her agonizing condition of being incurable and her short life-expectancy; a person whose lover has left him feels the harsh suffering of separation, abandonment, and a steep fall in self-worth. The decreasing approach, then, proposes that animals are not aware of the suffering that in the human arises from the higher-processes. Accordingly, some researches maintain that an animal's suffering is less than a human's. Akhtar writes, "There is a widely held view in philosophy and the biological sciences that the amount and ways in which an animal can experience pain as compared to us is limited to the feeling of sensory pain. The primary reason for this view is the belief that animals are less cognitively sophisticated than we are, and in particular that animals

Try not to end with a quote if possible.

lack awareness of self and sense of the past and the future. If pain is inflicted on animals, it is thought that while animals may be able to feel pain itself, they are not capable of the higher order suffering that may accompany the feeling of pain in us. This view suggests that pain for animals is not as bad as pain for us" (p. 495).

pretty vague?

Akhtar's approach, which I call the "increasing approach," proposes that the absence of higher-processes only worsens the pain of animals. Compared with humans, animals feel physical pain more than human beings feel it. Why? Because human beings are likely to use their conscious mental ability to deal with the feeling of pain, to attenuate it. For example, a person who has sustained a blow to her leg can turn her mind away from the pain, ignore it, and continue with her purposeful activity, for instance, to run a certain distance in a given time. That is, the feeling of pain is influenced by the individual's attitude to the pain that has gripped her. Animals are not able to attenuate their sense of pain, because they do not possess the relevant higher-processes. For example, an animal that feels physical pain cannot attenuate this feeling like a human, who comforts himself by imagining good days to come. Akhtar writes, "I will argue that due to the same reasons for which animals are thought to be incapable of sophisticated forms of suffering – namely, a lack of self- and time-awareness – a given amount of pain may actually be worse for animals in certain respects than may have thought and may even be worse for them than the comparable amount of pain is for us" (pp. 495-6). She explained this in the following way: "The first is that the intensity of pain for us can often be mitigated through expectations, memories, and the consideration of and attention to other interests. The second and main reason is that we are able to engage in inter-temporal calculations with respect to our interests and frequently discount pain in order to achieve other, higher order or longer term interests" (p. 496).

really?

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The Rational-Approach to the Problem of Pain and Suffering

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The main difference between the decreasing approach and the increasing approach lies in the way the higher-processes are used. On the one hand, one may present arguments and examples that support the hypothesis that the absence of these processes in animals only eases the animal's pain-suffering and their presence increases it in the human. For example, an individual may believe that the pain in his

leg signifies that he has a malignant tumor. On the other hand, arguments and examples can be presented supporting the hypothesis that these processes can be used to reduce and even to dispel the pain-suffering in the person but not in the animal (e.g., now I am concentrating on the soccer match showing on the TV screen and am not focusing on the pain in my leg). In the present article I do not intend to undermine the one approach and reinforce the other. Here I mean to show that animals, although not endowed with higher-processes that humans are endowed with, do possess cognitive and mentalistic tools that allow them to treat pain and suffering very well by applying means based on learning and rationality (we shall call this the "rational-approach").

The main argument of the present approach is that animals have memories of the past and expectations for the future, that is, they are able to learn and to change their behavior according to ~~the~~ circumstances, and some of their behavior may be understood as rational. I shall now describe two observations and an experiment ~~that~~ I have published in the past. I shall start with an observation of a dog at my residence (see Rakover, 2011). I call this observation "The dog and the elevator."

The dog and the elevator. A description of the place where the present observation took place is important. My apartment is located in apartment complex A, situated on a hillside. Above this complex there is apartment complex B, in which is the apartment of the owner of the dog, who is the hero of this observation. Below complex A is a parking lot for cars, from which a corridor curves its way to an elevator that connects the parking lot level to a small garden, from which one can reach the apartments in complex A and in complex B. The elevator ascends and descends nonstop between the parking lot level and the garden level, so that occupants of the two complexes can benefit from its service. (That is all the elevator did.)

The dog customarily lies all day in the parking lot, looking out onto the street from which cars enter the parking lot. One day, after I parked my car and was walking toward the corridor (which leads to the elevator), the dog suddenly began following me then running ahead of me, turning its head around from time to time be sure that I was continuing to walk toward the corridor. This behavior recurred also when I strode along the corridor to the elevator, the dog intermittently turning its head around to be certain that I was advancing toward the elevator. After some time, the two of us found

ourselves waiting for the elevator after I had pressed the descent button. When the elevator doors opened the dog quickly went inside, myself following. I pressed the ascent button and when the elevator arrived at the top floor the doors opened onto the garden and the dog ran out of it and entered apartment complex B.

How may we explain this behavior of the dog? To propose an explanation, I need to add two facts. First, this was the first and only time that the dog and I walked along the corridor and rose together in the elevator. Secondly, the dog and I knew each other from the many times that it had lain in the parking lot and had seen me entering or leaving the corridor. I suggest that the range of the dog's behavior (overtaking me, running, looking back, waiting for the elevator, etc.) may be grasped by an appeal to the teleological explanation: the dog's purpose was to reach its dwelling place, its master's apartment in complex B. To realize this purpose, the dog utilized my expected behavior, namely ascending in the elevator to the garden. To achieve this, the dog had to retrieve from its memory relevant information, such as its recognizing me as a creature that walked to the elevator and travelled in it to the garden (it is reasonable to suppose that the dog had taken the elevator several times with its master and generalized that information to me). The dog applied these pieces of information by means of its behavior, for example, it recognized me, ran and overtook me on my way to the corridor, checked from time to time whether I was walking in the correct direction, entered the elevator, and watched the doors that would open onto the garden (it stood in the elevator with its nose pointing in the direction of the exit).

From this explanation it emerges that the dog was endowed with a large number of intelligent abilities, for example, it could store past pieces of information, retrieve them, and use them to guide its behavior. To be sure, a dog is not endowed with intellectual abilities like a human, but it is endowed with abilities sufficient to contend with challenges, such as ascending in an elevator. Even though I am not certain that a dog has the ability to be self-aware, we may assume that it has fairly high levels of recognition of its feelings and its desires. And if it is aware of its own desires, it is possible to offer the hypothesis that it is aware that these desires are its own, that is, it may have some low level of self-awareness. And because the dog in the present observation recognized me, etc., it is hard to suggest that it was not endowed with information about the past and the future.

*How did the
dog know
you'd go
to the
proper
floor?*

I do not think that another explanation based on instinctive processes alone will succeed in clarifying the entirety of the dog's behavior. Likewise, a theory of mechanistic learning would be very hard pressed to explain the behavior of a dog that fetches for its master the leash so that its master will go out with it for a walk. (To the best of my knowledge, to date an entire theory of mechanistic learning has not proved able to contend with the concept of purpose, such as in the present case, where the dog's purpose was to reach its master's apartment, e.g., Rakover, 2018.) I shall now describe the second observation – on my Himalayan cat, Max (see Rakover 2007).

The pampered cat. Late one evening, when I was on my own watching television, Max sidled up to me. With his forepaws he scratched at the edge of the armchair in which I was sitting, and then remained seated on his rump, looking at me with his blue eyes. We exchanged looks. I leaned towards him, picked him up, settled him on my knees and stroked him. How can this behavior be explained – the mutual relation between Max and me? To be able to suggest a teleological explanation for this observation – Max wants me to pet him. ~~As he scratches the edge of the armchair~~ I have to emphasize that the scratching had undergone a change from a natural, adaptive, survival function to a new one: to summon my attention to him, with the aim of his being petted. The natural scratching is done by thrusting out the claws through stretching the toes of the feet when a cat enters the following situations: defense-attack, hunting, marking the scratched place with the cat's smell, and replacing claws. (Max has a special stand on which he customarily sharpens his claws.) None of these functions was effectuated in the present observation. Hence the scratching acquired a new function: a means to obtain reinforcements. The new function was acquired by a long learning process on the part of the cat, who had lived many years in the Rakover family apartment.

Based on these two observations, it may be suggested that animals (dogs, cats) have a high level of cognitive processes that make it possible for them to become adapted to their environment by means of learning processes: they remember past events, change their behavior accordingly, and as a result also become used to planning the future. Does this level of cognitive development allow the animal to develop self-awareness? This is an extremely difficult question. The observations discussed here are not sufficient to give an affirmative answer. Nevertheless, I tend to give a slightly affirmative answer because the explanation that suits these

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observations was obtained through appeal to the animal's subjective intent: the dog wanted to get to its master's apartment, and used me as a means of achieving its goal; and Max wanted me to pet him and achieved this by scratching the edge of the armchair in which I sat.

Given that animals (dogs, cats) do possess certain intellectual abilities, one may wonder if these abilities guide them to behave rationally especially in a pain/suffering situation. To answer the question, we may look at the following experiment, which I shall call "fear versus pain" (see Rakover, 1975).

Fear versus pain. If an individual in a certain state experiences sharp pain, she will avoid entering into that state because it will arouse in her fear of the pain that is liable to strike her a second time. For example, if the dentist has caused the individual sharp pain in the course of treatment, the individual will avoid returning to that dentist or will prefer to postpone treatment. The fear may be seen as suffering in addition to the feeling of pain itself. Because countless experiments have shown that various animals develop fear of pain, it may be suggested that animals feel fear in addition to the sensation of pain. For example, in states where a neutral stimulus such as light is associated with a pain-arousing stimulus such as electric shock, thereafter light will cause a reaction of fear: an animal is likely to freeze (e.g., rats tend to become frozen still, their fur stands on end, they cannot control their excretions, and they sometimes emit scream-like sounds) or take flight. In this sense then, the assumption that animals do not suffer but only feel physical pain is incorrect.

Given this, the general question that arises here is not who feels more pain and who suffers more – the human or the animal, but it is this: considering the relation between fear and pain, who behaves more rationally – the human or the animal? This question may be answered empirically by defining rationality for a fear/pain situation in the following way (see Rakover, 1975). Consider the following procedure that is applied to a device which consists of two boxes, when box A is connected to box B. First, in box A, a rat receives a strong electric shock and as a result box A arouses strong fear in the rat. Then the rat is transferred to box B in which it receives a very weak electric shock that steadily increases. This situation raises the following question: What level of pain in box B (caused by the increasing electric shock) is the rat ready to suffer in order not to enter box A which gives rise to the strong fear?

Does not quite
make sense if
she is already
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The description of the procedure, the device and the above question allow one to define two limits of rationality:

can you be more precise?

Lower limit: If the rat enters box A which arouses strong fear without even feeling a slight pain from the weak electrical shock delivered in box B, we may say that its behavior is not rational because it has learned nothing from its past experience (the pain it suffered previously in box A).

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Upper limit: if for non-entry into box A, the rat in box B suffers pain (caused by an electrical shock) that is greater than the pain it suffered previously in box A, we may say that its behavior is not rational because the rat pays for avoiding the fear aroused in box A with pain that is even greater than the pain it suffered earlier in box A.

Generalizing both these limits of rationality to humans, it may be asked whose is the more rational behavior—the human's or the rat's? Many examples can be brought showing that human behavior is really not rational. We may look at two examples. First, it seems that in World War II the Germans behaved ~~insanely~~ ^{irrationally} because they learned nothing from World War I, and embarked on World War II free of fear resulting from the previous war. ~~Their insanity~~ ^{This} meets the criterion of the lower limit. By contrast, the British and the French behaved ~~as if insane~~ ^{irrationally}, because their fear of war was so great that in the end they paid a higher price than the price they paid in World War I. ~~Their madness~~ ^{This} meets the criterion of the upper limit. It may be said that in these cases humans ~~behave with lack of sanity and they~~ cross the boundaries of rationality. A second ~~more regular~~ ^{more regular} example – fear of medical treatment (e.g., at the dentist's), leads people to a behavior of postponement (~~postponing medical~~ ^{postponing medical} treatment) which ultimately results in very high payment: they pay with far greater pain than the pain they are afraid of (to say nothing of the financial cost).

Using war here as an example is not a wife

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Insert about here Figure 1

Do animals also behave ^{irrationally} ~~rationaly~~, like humans? The following experiment which I conducted with white rats gives a negative answer: it transpires that rats are rational creatures (see Rakover, 1975). First I shall briefly describe the stages of the experiment. Figure 1 shows the device in which the experiment took place. It consists of two boxes with a connecting hatch that allows transition from box to box. The floor of each box is constructed of iron bars (rustproof) through which it is possible to send an electric shock to the rats' feet. (Note that years ago the ethical justification for such research was not yet being called into question.) In the first stage of the experiment the rat received fear conditioning (association of light and electric shock) in box (A): different groups of rats received electric shocks of varying strengths (in mA). In the second stage the rat was transferred to box (B), the hatch was opened, the frightening light was switched on in box (A) and the rat received in box (B) increasing electric shocks in units of 0.1 mA (at this stage an electric shock was not given in box (A)). The question was, what is the threshold of the fear? That is, what is the intensity of the electric shock delivered to the feet of the rat in box (B) that will cause it to move from box (B) to box (A)? What is the strength of the electric shock, the pain, that the rat is willing to pay for its fear? (The fear threshold is the shock intensity midway between that which left the rat in box (B) and that which caused it to move to box (A).) It transpires that the rat is willing to pay with pain that is about 23% of the strength of the electric shock that it received earlier in box (A). For example, if the rat received the fear conditioning with an electric shock of 2 mA, its fear threshold will be 0.46 mA. Moreover, as can be seen in Figure 2, the rat's freezing response also increased with the strength of the electric shock in the conditioning stage, but payment for the freezing was less than payment for escape (when the rat was free of its freezing it still did not cross into the terrifying box (A), but moved around box (B) where it received an electric shock).

Insert about here Figure 2

An immediate conclusion from this experiment is this: the rats' behavior is entirely rational. It lies between the lower limit and the upper limit of rationality defined above, i.e., the rat's behavior has not crossed the boundaries of rationality. By contrast, it emerges that humans often behave non-rationally; they cross the lower limit and the upper limit. Hypothetically, the reason why humans' behavior is not always rational is that it is motivated largely by higher-processes that animals are not endowed with (see discussion below).

Discussion: Pain, Suffering and Higher-Processes

At first sight, the original question of who suffers more seems like a question that cannot be answered. One may dispute the comparison between human and animal by means of the following question: what is the yardstick with which the suffering of the one can be compared with the suffering of the other? Even if one assumes that the feeling of pain in human and animal is similar – for example, the feeling of pain caused by an electric shock of 2mA for both is quite similar (due to the evolutionary processes that developed in mammals' mechanisms of feeling pain), this question will still be difficult to answer because of the wide difference in higher-processes between them.

Supposing therefore that the pain sensation is in fact universal (and appears in both animal and human), the decreasing-approach suggests that higher-processes intensify suffering in the human more than in the animal, because these processes create additional suffering which does not exist in animals. By contrast, the increasing-approach proposes that higher-processes assist in lessening the suffering, therefore animals suffer more than humans. Compared with these two approaches, the rational-approach suggests that in animals too, the suffering is influenced by cognitive processes, albeit not developed to the level present in humans. The animal is equipped with fairly good cognitive tools, which allow it to learn and remember, and change its behavior accordingly. As for pain and suffering, animals learn to fear; they are able to expect pain in the future; they react powerfully to threats. In other words, if we accept

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So, you are saying that irrational behavior is caused by more sophisticated processes?

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Weak

that feelings of this kind increase suffering, then it increases in both humans and animals. The observations on the dog and the cat are well explained in accordance with the teleological ~~explanation~~ model. This posits quite a high level of cognitive processes, by means of which the animal is able to realize its goals (e.g., the dog wanted to reach its master's apartment; Max the cat wanted to be petted).

The result of the experiment (fear vs. pain) shows that the rat's behavior is rational because it does not exceed the lower or the upper limit of rational behavior in a state of suffering (~~pain, fear~~). By contrast, a large number of human behaviors can be interpreted as showing that the human does indeed exceed these boundaries – he is not rational. These excesses emanate from higher-processes. Why? Because it will be hard to explain the glaring excess beyond the upper limit of rationality in states of suffering without resorting to the world of beliefs and values of the human developed on the basis of these processes. For example, it is hard to understand self-sacrifice without the human being's belief in the values of the motherland (e.g., kamikaze), self-sacrifice in the name of religion, going to war in the name of race and religious belief, and choosing a monastic way of life replete with asceticism, without reference to the human's social and religious beliefs. As animals have not developed such ~~X~~ kind of beliefs it is hard to find in them similar non-rational excesses.

Accordingly, one may suggest that higher-processes develop social, moral and religious values in the human that give rise to non-rational behaviors. From this, one may say that higher-processes cause greater suffering in the human than in the animal, which is not endowed with these values. But again, higher-processes are likely also to help the human: by their means humans have developed a marvelous civilization, which greatly reduces the human's suffering and ennobles him through worlds of pleasure, from which animals are far distant. It seems to me that I will not be excessively distant from rational discourse if I say the following: while animals use cognitive processes that can be interpreted as rational, the use humans make of higher-processes is perceived as irrational, even though in many instances they too are capable of using these processes rationally. The development that characterizes the human finds expression in what I have called higher-processes. These are likely to create two opposite outcomes. On the one hand, higher-processes reduce one's daily suffering by developing a culture that sets one a goal and imparts meaning to one's life; on the other hand, higher-processes intensify a person's suffering because his

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indebtedness to a specific culture as the possessor of absolutely correct meaning is so great, so deep, that he is willing to lay down his life for it and to murder the other as a heretic.

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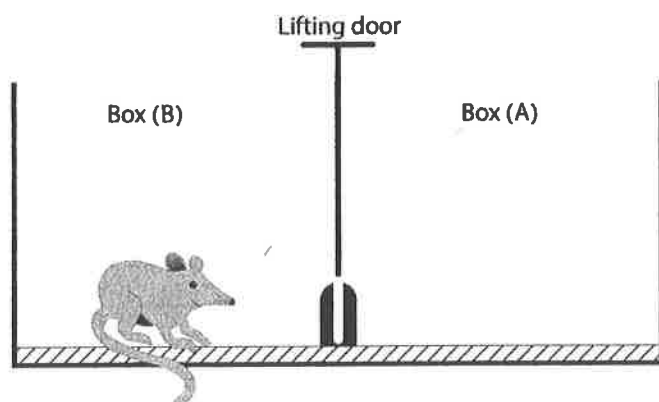


Figure 1: The device of the experiment: The floor is made of iron bars that can carry an electric current.

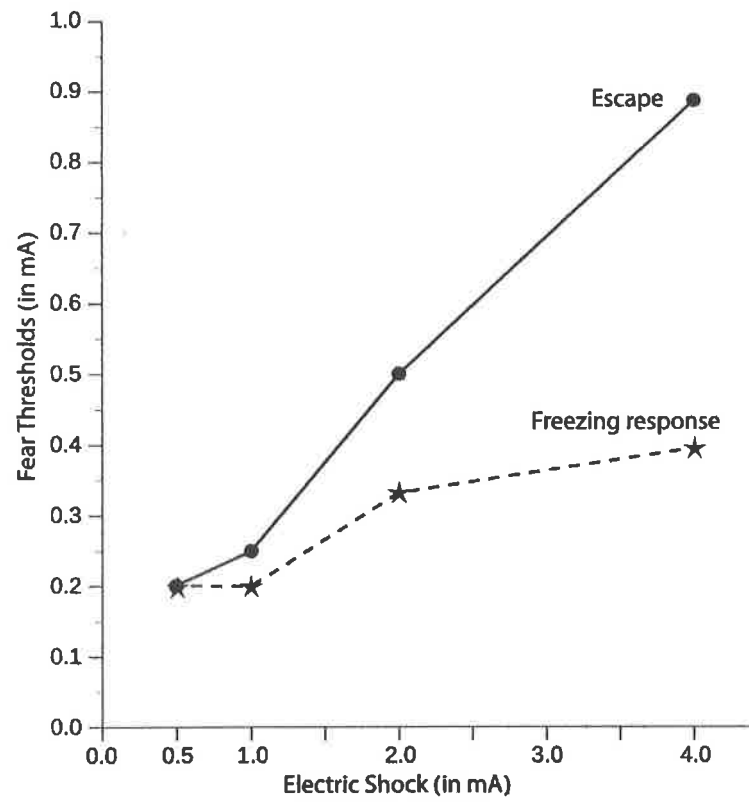


Figure 2: Fear thresholds (in mA) as a function of the strength of the electric shock (in mA).