

Aristotle and his ideas about animal's Animal classification (Aristotle, Linnaeus, Lamarck, Cuvier)



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Abstract

The Greek philosopher Aristotle wrote extensively on marine creatures in his books on biology. This paper provides a summary of Aristotle's scientific contributions to the understanding of marine biodiversity, with a focus on taxonomic categorization, nomenclature, and species distribution. Our findings demonstrate that Aristotle's strategy is strikingly similar to that of modern marine biologists because (i) he provided a taxonomic classification of marine animals that includes at least three levels of physical grouping; (ii) the majority of Aristotle's marine "major groups" correspond to taxa of the order rank in Linnaeus' classification and to taxa of the class rank in the current classification; and (iii) a positive correlation was found between these relationships. Given the above, we contend that Aristotle's theories on marine taxonomy are still relevant today.

Keywords: History of marine biology, marine biodiversity, Aegean Sea, Ancient Greece.

1. Introduction

With a few notable exceptions, the typical Western civilization has seldom ever demonstrated any consideration for or concern for all creatures. The rigid and widespread western conventions have, in fact, encouraged people to employ nonhuman animals and the natural world on a voluntary basis to meet their needs or make choices, whether they are needed or not. Human hawkishness and speciesism have been concealed by this. This third point of view, which sees nature as an infinite repository of resources for mankind, may be described in biblical words as dominionism. This has prompted people to use every method necessary to control and exploit nature and other living things. It has undervalued the fact that four people—or more—are important on their own, that is, they have intrinsic value. Different beings and objects may be regarded, but only if they are useful to humans, which means they only have instrumental value. However, since the turn of the 20th century, we have come to see that this Dominionism is morally inadequate and self-destructive as well; it is the primary cause of several disastrous ecological crises that threaten our existence on this blue planet. More than 7.63 billion people's wild use of the environment as a source of natural resources, including non-human animals, to meet their needs has increased ecological problems such as global warming, ozone depletion, air and water pollution, extinction of species, and others. We are

presently "bound" to realise that we are not the "masters" of the earth, but rather one of many species that live there. All elements of nature are vital to the existence of the earth and are interconnected with one another to maintain environmental balance. Following this acknowledgement, a few modern moral luminaries have begun to criticise this human-centered moral perspective on nature and argue that ethical consideration should extend to non-human instincts, including those of beasts.

The moral dilemma of using animals as our resources and, as a result, subjecting them to excruciating suffering has to do with how higher beings, in particular, are set up to experience pleasure and sorrow like humans. Moral philosophers, and more especially applied ethicists of the 20th century, argue that accepting these aware beings as human property and inflicting suffering upon them constitutes doing them harm. With this affirmation, non-human animal moral reasoning has started, and as a result, we have another subfield of applied ethics called creature morals, which examines how humans relate to other living things morally. Animal ethics may be thought of as a branch of practical ethics that aims to liberate animals from odious, pointless, and cruel suffering. The first step in achieving the goal is to re-comprehend the ethical difficulties involved in relationships between humans and other creatures via knowledge and thought. Despite such academic, hypothetical effort, there has also been some activity. The main concerns with regard to creature morality are: using animals as test subjects, growing and slaughtering them for food and for amusement, keeping them as pets, hunting, and similar activities. The ethical standing of non-human animals, the questions of correspondence, liberties, and equality for creatures, as well as restrictions on conventional human-centric speciesist profound character, are some of the forms that these dilemmas take on in the hypothetical plain.

1.1.Objective of the Research

- To Creation of reasonably large dataset of animals consisting of many classes, both images and videos.
- To Devising segmentation algorithm to extract the animals from images videos

2. Literature Review

(Burghardt&Calic, 2006) put out a technique for spotting and following animals in film of nature This approach deals with the issue of tracking and detecting animals, and it uses lion

films as a test example. In order to track the animal, a tracker is paired with a detection technique employing low level characteristics and a face identification algorithm that uses Haar-like features. AdaBoost classifier is used to categorise animal actions including walking, standing still, and trotting.

(Lahiri, Tantipathananandh, Warungu, Rubenstein, & Berger-Wolf, 2011) provided an example of a computer-aided approach to identifying certain animals. Initially, a colour segmentation technique is used to segment the pictures. Using textural characteristics, individual animals may be identified. In 2008, (Ardovini, Cinque, & Sangineto) suggested a technique for recognising elephants in pictures. Elephant identification is done utilising form characteristics. The query picture and the database image are compared after segmentation using a semi-automatic segmentation technique. Based on the nicks characterising the elephants, the identification is then made.

An automated system that can identify animal species in video is described by (Khorrami, Wang, & Huang, 2012). Three steps make up the suggested technique. Using robust principal component analysis, background is removed in the first step. Later, the creatures are separated from the foreground areas using local entropy. Finally, the Prologue 7 regions that correlate to significant velocity fluctuations are kept, indicating the presence of animals in the movie.

A technique for animal categorization utilising joint textural information was suggested by (Afkham et al., 2008). In order to categorise the animals into their appropriate groups, the study aims to extract the joint distribution of textons, which are then fed into probabilistic and support vector machine classifiers. Elephant identification and tracking method for wildlife video was suggested by Zeppelzauer (2013). Color models of elephants are taken into consideration for the detection process using a limited collection of training photographs. During testing, elephants are extracted from the frames by segmenting them based on colour attributes. The trained colour model is then utilised with several classifiers, including SVM, NN, and KNN, to identify elephants. Last but not least, tracking is carried out utilising shape, texture, and temporal information.

3. Methods

Traditional moral philosophers have attempted to establish some universally legitimate principles that might be used in all circumstances. They seem to restrict their research to the nature of morality and the development of normative ideas in line with it. However, despite their seeming purity and nobility, these normative ideas do not hold up when applied to actual circumstances. As an illustration, consider the kidney transplant scenario. Nowadays, kidney transplantation has a fantastic success rate because to advances in medical understanding and technology. However, according to conventional ethical standards, such as Immanuel Kant's Categorical Imperative addressing ends and means, kidney transplantation is not permitted for a patient who is near death since Kant forbids the use of a rational person's body as a means. Many of these social and moral concerns we face on a daily basis call for appropriate moral direction and leadership. As a consequence, in the second part of the 20th century, Applied Ethics/Practical Ethics became a new area of study in ethics. Applied ethics attempts to address numerous moral issues in our everyday lives by using certain moral standards, despite the fact that it does not provide a new independent theory.



Figure: 1 Animal Ethics

4. Result and Discussion

We have argued that since animals are sentient beings who experience pleasure and misery, what we do to them matters. Animal rights activists believe that we are wrong when we use these creatures as nothing more than resources to meet our wants and cause them misery. This insight prompts us to acknowledge that we have moral obligations toward animals. And if we do a literature review on the subject of human attitudes toward and obligations toward animals, we would come across three distinct sorts of approaches or recommendations. Some philosophers, such as Aristotle and Descartes, contend that animals are fundamentally distinct from humans, are subordinate to them, and exist only to fulfil the needs of humans. As a result,

we owe them nothing. This strategy is known as No-Duty View. Some others, like Immanuel Kant (1724-1804), John Rawls (1921-2002) argue that, though animals deserve no moral consideration as they lack requisite characteristics to be treated as moral beings, we have some obligations to them, though they are indirect. These responsibilities arise from our direct responsibilities to others. This perspective is known as the Indirect Duty View. However, modern moral philosophers, especially those who support animals, acknowledge the moral status of animals and argue in favour of having specific obligations to them. Direct Duty View is the term used to describe this method. We like focusing on various iterations of each of these viewpoints.

4.1. Different Versions of No-Duty View

The animals, long believed to be nothing more than living things devoid of any thinking faculties, now live only for human needs. This perspective on animals leads to the denial of any moral duties owed to animals. Aristotle in the ancient era and Descartes at the start of the modern era are two notable thinkers who, among others, are 71 accountable for the creation and maintenance of such a viewpoint, which was prevalent until the beginning of the 19th century. Additionally, theological influences such as dominionism in Christianity assisted in incorporating this perspective on the rule of the non-human.

5. Conclusion

We have so far investigated, contrasted, and evaluated two current prominent viewpoints on the topic of our moral relationships with animals—the Animal Welfare view and the Animal Rights view—in considerable depth. We note that Peter Singer has expanded the traditional utilitarian premise of equal consideration of interests to include creatures other than humans in his Welfare proposal. Regan, on the other hand, has expanded the application of his theory of responsibility to include rights for animals, while Kant restricted his theory of obligation to humans. Regan adamantly maintains that since higher animals, at least, have intrinsic worth, they should likewise be regarded as "ends" rather than "means," just like humans. Additionally, it seems that Singer's Welfare perspective is less compelling conceptually than Regan's Rights approach. We cannot argue that any exploitation of animals for human interests is, in and of itself, ethically reprehensible. It is also true that non-vegetarian individuals may still abuse

animals in farms and labs despite Singer's restrictions and welfare measures for their protection. But given our knowledge of how rights work, we can confidently state that recognising rights helps to safeguard individual interests in our society. From this vantage point, Singer's Welfare policy seems to be conceptually superior than Regan's Rights viewpoint.

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