

**The Ethical Dilemma of Animal Experimentation:
A Case Study of Peter Singer's Theory of Animal Liberation**

By

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**A Dissertation submitted in Partial Fulfillment of the Requirement of the Degree of
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DECLARATION

This dissertation is my original work and has not been presented for a degree in any other University

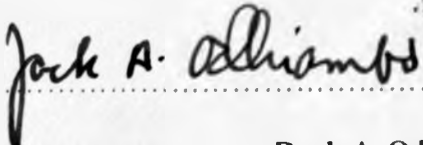
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This dissertation is dedicated to my mother for her exemplary self-discipline.

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ABSTRACT

This dissertation seeks to study the dilemma of animal experimentation by focusing closely on Peter Singer's theory of animal liberation. Whereas animal experimentation is of importance to man, the proponents of animal liberation argue that the practice is basically anthropocentric and speciesist. In order to delve into the dilemma, certain things considered important have been dealt with: The fundamental principles considered to be underlying the notion of animal liberation vis a vis major reasons offered against liberating animals; evaluation of the scientific issues like causal disanalogies in use of animals as models in applied biomedical research and the relevance of basic animal research to human biomedical phenomenon. From the onset, it appears the dilemma is embedded in the "marginal cases" issue but it becomes clear that even if the marginal cases issue is resolved, another dilemma, which is rather baffling and mind-boggling, ensues.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

When the English Philosopher, Jeremy Bentham, predicted two hundred years ago that a day may come when the rest of animal creation may acquire those rights which never could have been withheld from them but by the hand of tyranny¹ nobody took his words seriously. This was due to the fact that man's view of the world, as it is largely today, was anthropocentric.

As a philosophical perspective, anthropocentrism asserts that ethical principles apply to humans only, and human needs are of the highest value and importance. Accordingly, anthropocentrism as a theory holds that one should give ethical consideration only to beings with 'moral standing' and that the criterion for moral standing is membership in the species of *Homo sapiens*²

Anthropocentrism is supported by those who hold that *Homo sapiens* possesses some characteristics that make them stand out from the rest of creation. Only human beings, for instance, are persons. Persons are thus separated from inanimate objects, machines, plants, animals and spirits.

Consequently, by employing the concept of person, moral rights are restricted to human beings – that is to Homo Sapiens. And as S.F. Sapontzsis observes:

Moral arguments for why all human merit moral rights invariably presume that the basis for meriting rights is to be found in something, such as soul, abstract rationality, or self awareness that only humans are supposed to possess, something that makes our species stand out from nature...”³

Anthropocentrists therefore justify their position by citing unique characteristics of the human species. Saint Thomas Aquinas, for instance, believed that intellectual creatures hold highest place in the universe because they approach nearest to divine likeness; God is intelligence in its totality. Immanuel Kant emphasizes in his arguments the central role played by human capacity to reason.

Australian philosopher, Peter Singer, follows Bentham in claiming that: “ If a being suffers, there is no moral justification for refusing to take that suffering into consideration”⁴ As Singer further puts, “this is why the limit of sentience (using the term as a convenient, if not strictly accurate shorthand for the capacity to suffer or to experience enjoyment) is the only defensible boundary of concern for the interests of others”⁵ Singer, therefore, holds that the criterion for moral consideration is sentience and if sentience is the only defensible boundary of concern for the interests of others, then sentient creatures are equal with respect to pain. With these in mind let us proceed and have a look at the ethical theory Singer holds.

In answering the question about how we ought to live, Singer takes a utilitarian stand. Utilitarianism can be reduced to two principles: The principle of equality and the

principle of utility. The principle of equality dictates that everyone's interests count and similar interests must be counted as having similar importance. The principle of utility dictates that one should do that act that will bring about the best balance of satisfaction over frustration. Utilitarianism of Singer differs from classical utilitarianism in that 'best consequences' is understood as what, on balance, furthers the interests of those affected, rather than merely what increases pleasure and reduces pain⁶

In Singer's utilitarianism, the principle of equal consideration of interests is of central importance when it comes to the criterion of moral considerability. And just the same way a racist gives greater weight to the interests of the members of their own race when there is a clash between their interests and those of another race, speciesists give greater weight to the interests of the members of their own species when there is a clash between their interests and those of another species⁷. Speciesism therefore is a systematic discrimination based on species membership that is analogous to racism.

According to non human animal (in here known as 'animal') liberationists like Singer, the way humans treat animals is the evidence that humans are speciesists. Animal experimentation which is basically carrying out of biomedical experimentation and thus entails vivisection, testing of new drugs and cosmetics on animals before they are used on humans, and investigations of toxic substances using animals, etc, are some of the activities where speciesist discrimination is evident.

To rebut the argument advanced by animal liberationists, anthropocentrists argue that man's tyranny over animals is natural because his superiority as an animal determines for him the dominant position in the natural scale of things. Aristotle, for instance, holds that:

"... nature makes nothing incomplete and nothing is vain, and inference must be that she has made all animals for the sake of man...the tame for food, the wild, if not all, at least the greater part of them for food, and for provision of clothing and various instruments."⁸

Anthropocentrists basically focus on the benefits of animal experimentation to human beings. Their position is that animal experimentation has promoted and still promotes human health and well-being. As a scientific research society puts it:

" Research with animals has been remarkably successful in generating both basic and applied knowledge. Without further research with animals, there will be no vaccine for AIDS and dramatically fewer advances for treating and preventing heart disease, cancer, and other serious health problems"⁹

Some people do deny that animals can feel pain and or distress but those whose ethics is based on sentience wonder why one should deny animal's suffering. This is because the experimenter needs to stress the similarities between humans and other animals to claim that their experiments may have relevance for human purposes. To elucidate the point that animals also feel pain and distress, Singer notes that: "even researchers who make rats to choose between starvation and electric shock to see if they develop ulcers (they do) do so because they know that the rat has nervous system similar to man's and presumably feels electric shock in a similar manner"¹⁰

Moreover, Singer contends that:

"The experimenter shows a bias for his own species whenever he carries out an experiment on a non-human for a purpose that he would not think justified him in using a human being at an equal level of sentience, awareness, ability to be self-directing.... if this bias were eliminated, the number of experiments performed would be zero or very close to it"¹¹.

To this end, an exposition of Singer's position which is in disagreement with anthropocentrism has been given.

1.2 Problem Statement

Anthropocentrists contend that the criterion of moral considerability is membership in the species of *Homo sapiens*. Humans are endowed with soul, ability to reason, among others, which other species supposedly lack. Therefore it does not matter whether animals suffer in the course of experimentation because humans' boundary of ethical concern should be limited to *Homo sapiens*. Moreover animals being part of nature are there for human beings to exploit in order to generate basic and applied knowledge and to promote their health and well-being.

On the other hand Singer argues that the criterion for moral considerability ought to be sentience. If a being suffers there is no moral justification for refusing to take that suffering into consideration. Therefore, an experimenter shows bias for his own species whenever he carries out an experiment on an animal for a purpose that he would not think justified him in using human beings at an equal or lower level of sentience, awareness, among others.

The problem is that if the practice of animal experimentation is encouraged, then those who support the practice will be accused of bias in favor of their own species and if the practice is discouraged then some results desirable for human sustainability will not be

achieved. Either the practice is encouraged or the practice is discouraged, i.e. either we experiment or we don't experiment. And this is the problem.

1.3 Research Objectives

- 1) To understand the nature of animal experimentation.
- 2) To expose the dilemma inherent in animal experimentation.
- 3) To critically examine Peter Singer's utilitarianism in the light of animal liberation.

1.4 Justification and Significance of the Study

Animal experimentation is a part of the current biomedical paradigm and since a paradigm guides the practice of a science, scientists operating under the paradigm do not normally question it; and this has been the case as regards animals experimentation in Kenya, for instance. This research is going to give moral appraisal of this practice which is usually taken for granted.

By taking into consideration the arguments presented by anthropocentrists as well as the ones presented by those whose criterion for moral considerability is sentience, it is hoped that an insight into how humans ought to relate with animals will be had; and this will even determine the fate of animal experimentation.

The findings of this research are also meant to act as a guide to policy making as regards animal experimentation and some other pertinent issues. This work will also be a scholarly contribution to the existing stock of knowledge and it is as well intended to be a

basis for further research on animal liberation in general and animal experimentation in particular.

1.5 Literature Review

Historically, religious and philosophical traditions have been anthropocentric in nature. Let us take a look at both before venturing into the current debate on animal liberation.

Beginning with the creation story of Genesis, Judeo- Christian thought maintains that other species were put for our purposes. According to that creation story, we are to “fill the earth and subdue it; and have dominion over the fish of the sea and birds of the air and every living thing that moves upon the earth”¹². And latter in Genesis after the flood, we are told, “every moving thing that lives shall be food for you; and I give you everything.”¹³

These biblical injunctions have been supported by centuries of Christian theology. Humans are created in the image of God; other animals are not. Humans have immortal souls; other animals do not. Humans belong to both the spiritual and material worlds; other animals belong only to the material. In effect, owing to the stand taken by anthropocentrists, one may conclude that the influence of Christian thought on the world civilization has enhanced the entrenchment of anthropocentric position.

Secular philosophers have, in the main, propagated anthropocentrism. The great philosophers, Aristotle, Saint Thomas Aquinas, Rene Descartes and Immanuel Kant, for

instance, point out rationality as a special characteristic of man that makes him stand out from the rest of the animals.

According to Aristotle, man's tyranny over animals is natural because his superiority as an animal determines for him the dominant position in the natural scale of things. He contends that man is by nature superior to other animals because just as:

It is both natural and expedient for the body to be ruled by the soul, and for the emotional part of our natures to be ruled by the mind, the part which possesses reason... this is also true as between man and other animals.¹⁴

The questions that one can ask Aristotle is whether conformity with nature an adequate condition for ethical standard and whether being moral is a question of abiding the laws of nature.

St. Thomas Aquinas who believes that humans, as opposed to animals, are intellectual creatures holds that:

“In the course of nature, the intellectual substance uses all others for its own sake; either for the perfection of the intellect... or for the execution of its power and development of its knowledge.”¹⁵

Immanuel Kant, like Aquinas, emphasized the idea that we should not be cruel to animals because we may become cruel to human beings. Kant says, “those who are cruel to animals become hard also in dealing with human beings.”¹⁶

The above statement by Kant implies that our duties towards animals are merely indirect duties towards humanity. Kant puts respect for persons at the center of morality: We are not to treat other persons merely as a means to our own ends. And to be a person, he said,

is to be an autonomous being, one that has the capacity to act for reasons and to reason about its reasons; that capacity does not belong to nonhuman animals which are, then, beyond the pale of morality. Kant therefore holds that:

“ Vivisectionists, who use living animals for their experiments, certainly act cruelly, although their motives are praiseworthy, and they can justify their cruelty, since animals must be regarded as man's instruments....”¹⁷

Kant, therefore, takes rationality as making a qualitative difference to an interest, one that gives it moral significance. However, one is left to wonder whether animal interests can be diminished merely because it does not think about them the way humans do.

The great French Philosopher, René Descartes, argued that an animal, unlike a human

“ never happens that it arranges its speech in various ways, in order to reply appropriately to everything that may be said in its presence, as even the lowest type of man can do... they cannot arrange different words together, forming of them a statement by which they make their thoughts known.”¹⁸

Descartes finally concludes that in his opinion, he absolves men from the suspicion of crime when they eat or kill animals¹⁹ since they (animals) cannot entertain their desires linguistically,

In 1975, Peter Singer published his landmark book, *Animal liberation*, which ignited the current debate on animal liberation. The title of the first chapter, like the title of the book itself, clearly announced the author's basic moral message: "All animals are equal." It would be expedient to have a look at Singer's justification for the above proposition.

Like other utilitarians, Singer holds that an ethical judgement must be made from a universal point of view. He holds that:

“ in accepting that my ethical judgement must be made from a universal point of view, I am accepting that my own interests cannot, simply because they are my own interests, count more than the interest of anyone else.”²⁰

Singer, therefore, believes that in one's actions, one must take into consideration the interests of those affected by one's decision. The basic principle of equality, therefore, is the principle of equal consideration of interests.

In the light of Singer's utilitarianism, we need to answer the following questions before we perform an experiment: Is there a genuine need to use animals in experiments intended to benefit humans? How valuable is the knowledge sought and how useful is the animal to obtain that knowledge? In other words, is the knowledge sought of comparable moral significance to the harm done to the animal? These are questions worth ruminating over.

G.R. Gallistel, on the contrary, contends that:

“while it is true that these experiments cause pain and/ or distress to the animals, it is equally true that science cannot progress without them.... While it is true that most of the animals in the course of neurobehavioral research suffer in vain, it is equally true that there is no way to restrict experimentation only to those experiments that will yield meaningful data.”²¹

Gallistel's argument leaves a lot to be desired. First, there is no clarity as to what 'progress in science' means. If progress in science means acquiring more and more knowledge about human beings, then as Mary Midgley puts it:

" While all research produces knowledge, a good deal of knowledge is not worth producing... Justification must therefore rest on importance, but an important issue is by definition a pervasive one. It is not an isolated matter, it is something far- reaching which crops up in many contexts and has many widely varied effects. If this is so, it can be tested in many ways. So it is impossible that tests which inflict sufferings on animals are the only ones, and unlikely that they are the best by which an important issue can be settled."²²

Midgley, however, does not give alternatives to animal experimentation.

Tom Regan takes a stand which he calls rights view. Unlike utilitarianism, rights view principle denies that we can justify good results by using evil means that violates an individual's rights. Individuals have rights because they have independent value. Regan contends that:

" For either of us to treat the other in ways that fail to show respect for other's independent value is to act immorally- is to violate the individual's rights... inherent value belongs equally to those who are the experiencing subjects of a life. Whether it belongs to others- to rocks and rivers, trees and glaciers, for example- we do not know- and may not know."²³

It is in the above sense that Regan concludes that animals are like us in being subjects of life. Animals used for experimentation, e.g., in laboratories, have inherent value. Finally, Regan points out that:

"In the case of using animals in science, the rights' view is categorically absolutist. Lab animals are not our tasters; we are not their kings. Because these animals are treated- routinely, systematically- as if their value is reducible to their usefulness to others, they are routinely systematically treated with lack of respect, and thus are their rights routinely, systematically violated. This is just as true when they are used in trivial, duplicative, unnecessary or unwise research as it is when they are used in studies which hold out real promise of human benefit... the best we can do when it comes to using animals in science is- not to use them. That is where our duty lies..."²⁴

Regan's position is clear and candid; and it is absolutist in the sense that it calls for a total abolition of animal experimentation. Regan, however, has not addressed the issue of the

usefulness of some of the experiments. Take for example a case of an outbreak of a new disease among a particular species of animals. Will it not be useful to experiment on one animal if doing so will save the whole species from perishing? Such are the pertinent issues Regan leaves hanging. His position is that at whatever cost, no experiment should be done on an animal.

Hugh LaFollete, on the other hand, stresses the fact that animal experimentation is not overwhelming in various ways. It is true that animals models are strongly analogous to the human conditions they model, and so we can straightforwardly extrapolate findings in laboratory animals to humans. But in spite of the above conviction it can be questioned to what extent the extrapolation is relevant for drug testing because we can not always safely extrapolate findings in non human animals to humans.

Quoting various researchers, LaFollete notes that:

“morphine sedates humans but stimulates cats (Brude 1962: 375) penicillin has adverse effects on guinea pigs by wiping out their intestinal flora, leading to disease and death (Kappanyo, and Avery 1966: 250), and industrial chemical benzene causes leukemia in humans but not in mice (Sax 1981:385) ... Fenclozic acid produced no effects on more than thirteen species but immediately caused liver toxicity in human subjects. Even the most common drug given to humans does not have uniform effects in non- human animals... thus, there are many cases of false positives and false negatives: Some drugs are safe for animals but toxic for humans; others are detrimental to animals yet valuable for humans. The cases raise, in concrete form, the problem of relevance.”²⁵

Using animals for experimentation, apart from raising significant moral issues also raises profound political issues. A lot of public and private funds are spent for biomedical research presumably because of its immense payoff. If, however, the payoff for human

health and well-being is less than overwhelming, the practice is practically problematic, especially when research funds become scarce. It is indeed dubitable whether animal experimentation is astoundingly beneficial to human beings even when the harm it does to animals is put aside.

1.6 Theoretical Framework

In analyzing the dilemmas of animal experimentation, the study will seek to employ the theory of anthropocentrism and sentience theory as propounded by singer.

As a philosophical perspective, anthropocentrism asserts that ethical principles apply to humans only and human needs and values are of the highest value and importance. Accordingly the proponents of the perspective, notably among them Immanuel Kant, argue that our moral concern should be exclusively restricted to human beings because they are rational. Those who hold the principle of absolute value like Aristotle say that morality is the relation of fitness that the act has to the perfecting of man's nature. Altruists on the other hand maintain that morality is the relation of the act to the well being of others. Generally, anthropocentrists often justify their position by citing unique characteristics of the human species.

Sentience theory as propounded by Singer holds that ability to suffer and /or to enjoy is the criterion for moral considerability. In one's actions, therefore, one ought to give equal consideration to the interests of all sentient beings that are going to be affected by their actions. A person who gives greater weight to the interests of the members of their own

species when there is a clash of between their interests and those of another species is a speciesist.

1.7 Hypotheses

In this study about the dilemmas of animal experimentation, the following hypotheses will be tested:

- 1) That animal experimentation is influenced by speciecism.
- 2). That Sentience is the most defensible boundary for moral considerability.
- 3) That animal experimentation is of great importance to man

1.8 Methodology

The study employs the philosophical method of critical and logical analysis and synthesis. The study also constitutes exposition and analysis of relevant cognate issues and concepts.

For the expository part of the work, library research will be imperative. Information will be gathered from various books, journals, newspapers, magazines, web sites, and unpublished works from seminars and conferences.

The information gathered will be subjected to typical philosophical method which involves critical analysis and interpretation.

Notes

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- ² Christine Pierce and Donald Van De Veer, Basis Issues in Environmental Ethics (London: Words Worth publishing Company, 1995),7
- ³ S.F. Sapontzis, Morals, Reasons, and Animals (Philadelphia: Temple University Press, 1987), 53.
- ⁴ Peter Singer, Practical Ethics (Cambridge: Cambridge University Press, 1979), 50
- ⁵ Ibid., 50 & 58.
- ⁶ Peter Singer, "All Animals are Equal" in Animal Rights and Human Obligations, Tom Regan and Peter Singer, eds. (Englewood Cliffs, New Jersey: Prentice Hall, 1989), 83.
- ⁷ Peter Singer, Practical Ethics. (Cambridge: Cambridge University press, 1993), 58.
- ⁸ Aristotle, The Politics. Translated by T.A Sanclair (London: Penguin Books Ltd. 1963, Re printed, 1988), 79.
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- ¹¹ Peter Singer "Animal liberation" in People Penguins, and Plastic Trees: Basic issues in Environmental Ethics. (New York: Wadsworth Publishing Company, 1995), 56.
- ¹² Genesis 1:28, in The Holy Bible: Revised Standard Version. Translated from the original languages being the version set A.D. 1611; Old Testament Section Copyright 1952 (New York: WM. Collins & Sons Co. Ltd.).
- ¹³ Ibid., 9:3.
- ¹⁴ Aristotle, op. cit., 68.
- ¹⁵ Saint Thomas Aquinas, Summa Contra Gentiles, Translated by English Dominican Fathers (Chicago: Benziger Brothers, 1928). Third Book. Part II, Chap. CXII.
- ¹⁶ Emmanuel Kant " Duties to Animals and Spirits. Lectures on Ethics. Trans. Louis infield (New York: Happer and Row, 1963), 240.
- ¹⁷ Ibid., 241.
- ¹⁸ Rene Descartes, Discourse on Method, trans.E.S Haldene and G.R.T. Ross (London:Canbridge University Press), 116.
- ¹⁹ "Letter of Descartes to Henry" (February 5, 1649) in Descartes: Philosophical Letters, trans. And ed. Anthony Kenny (oxford: Oxford University Press, 1970)
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- ²¹ G.R Gallistel, " The Case of Unrestricted Research Using Animals," in Animal Rights and Human Obligations, Tom Regan and Peter Singer eds. (Englewood Cliff: Prentice Hall, 1989), 79.
- ²² Mary Midgely, "The Case for Restricting Research Using Animals", in Animal Rights and Human Obligations, Tom Regan and Peter Singer, eds. (Englewood Cliff: Prentice Hall, 1989), 219.
- ²³ Tom Regan, "The Case for Animal Rights" in People, Penguins and Plastic Trees: Basic Issues in Environmental Ethics, ed. Christine Pierce and Vandever (Bonn: Wadsworth Publishing Company, 1995), 77-78.
- ²⁴ Ibid., 78.
- ²⁵ Hugh Lafollete and Niall Shunks, op.cit., 25.

CHAPTER TWO

ANIMAL LIBERATION AND THE IDEA OF EQUALITY

In the course of history, different liberation movements have come into being to liberate groups whose interests are unequally considered on arbitrary grounds by other groups or echelons of the society. In history, there has been Black Liberation, Women Liberation, Gay Liberation, and during the last quarter of last century, the new notion of Animal Liberation has featured prominently. As Peter Singer puts it: A liberation movement demands an expansion of our moral horizons so that practices that were previously regarded as natural and inevitable are now seen as intolerable.¹

In this chapter, an investigation shall be done into the possibility of expanding one's moral horizon to embrace the idea of Animal Liberation. And since the idea of equality is of great import for any liberation movement, first and foremost, an attempt shall be made to trace the basis of equality; and in so doing, contractarian, anthropocentric, Singers utilitarian, Kantian Natural Rights and Tom Regan's Rights view theories shall be assessed. Secondly, an attempt shall be made to investigate into whether the idea of equality is relevant to the notion of Animal Liberation. A critique shall also be given on some of Singer's views.

2.1 The Basis of Equality

As P.A. Woelfl² notes, Equal Rights Movements have been present in American scene. There has been Equal Rights of Negroe Movement, Parking Authority and Equal Rights

of Women Movements. These Civil Rights Amendments were the culmination of persistent antislavery movements dating from pre-Revolutionary days. History has it that in 1875, in order to grant equal rights to Negroes, Congress enacted a Civil Rights Act forbidding racial discrimination in Public conveyances, hotels, theatre, and other places of public amusement. And with regard to equal rights of women, in 1844, the large and courageous role of women in the frontier life of the growing nation lent a telling argument for equality of status, all these endeavors for equal consideration were being made by the groups (Black and Women) who were being discriminated against because they held the belief that all human beings are equal. And as Peter Singer puts it, "the principles that all human beings are equal is now part of prevailing political and ethnical orthodoxy".³ However, the baffling question is; what exactly is the philosophical basis of the principle that all humans are equal? What follows is an attempt to consider the answer different philosophers have given to the question concerning the basis of equality.

2.1.1 Contractarianism

Here, very crudely, is the root idea: morality consists of a set of rules that individuals voluntarily agree to abide by as is done when people sign a contract hence the name contractarianism. Different brands of contractarianism have been put forward, but the one that profoundly traces the basis of equality is Rawlsian version of Contractarianism.

John Rawls, in his influential book: A Theory of Justice, maintains that the basis of equality is 'moral personality'. He holds that the pre-requisites of moral personality are ability to have a sense of justice and an ability to have a sense of 'good'. Furthermore,

Rawls says that "there is no race or group of human beings who lack this attribute. Only scattered individuals are without this capacity".⁴ This, he believes makes 'moral personality' a universal base of equality.

There is a problem with Rawls 'moral personality' as the basis of equality. For instance, infants and small children do not have a sense of justice. For this reason, they are outside the realm of equal consideration. Furthermore, he says that: "those who are more or less permanently deprived of moral personality may present a difficulty."⁵ In this sense he admits that those, for instance, with irreparable mental damage are not owed the guarantee of equality but he offers no suggestion towards a solution of this difficulty.

The implication of Rawls position on the basis of equality could be this: those who understand and accept the terms of the contract are covered directly - have rights created by, and recognized and protected in, the contract. And these contractors can also have protection spelled out for others who, though they lack the ability to understand morality and so cannot sign the contract themselves, are loved and cherished by those who can. The young children, for example, are unable to sign and lack rights. But they are protected by the contract nonetheless because of the sentimental interests of others, most notably their parents. So we have, then, duties involving these children, duties regarding them, but no duties to them. Our duties in their case are indirect duties to other human beings usually their parents.

'Moral personality', therefore, does not provide a satisfactory basis for the principle that all human beings are equal. This is because children, infants, and those with irreparable mental damage are not owed the guarantee of equality. Sentimental interests of others which one may claim extends the principle of equality to these humans, who are incapable of signing the contract, is something which is arbitrary and only depends on the degree of sentimental attachment one has towards infants and the senile. Moreover, since infants, small children and those with irreparable mental damage lack 'moral personality' whose criterion is ability to have a sense of justice and ability to have a sense of 'good', strictly speaking, in Rawls view, are not owed the guarantee of equality.

2.1.2 Anthropocentric paradigm

Akin to Rawls' theory of 'moral personality' is an anthropocentric paradigm, which stresses 'moral standing' as the basis of equality. According to anthropocentric paradigm, the criterion for moral standing is membership in the species of *Homo sapiens* and thus, only human beings qualify as having 'moral standing'.⁶

Moral standing as the basis of equality begs the question of what the most defensible criterion of moral standing is. It leaves the question unanswered. Therefore moral standing, as Pierce puts it, "like other deeply entrenched assumptions, have often functioned like a pair of lenses through which we view and conceptualize the environment, and not as itself an object of view, as something to be subjected to philosophical scrutiny".⁷

2.1.3 Natural Rights Theory: Kantian Arguments

Although German philosopher, Immanuel Kant, (1724-1804), did not explicitly address the notion of the basis of equality, he clearly alluded to the idea of equality by holding that persons are sorts of being that have rights. Kant explicates what a person is by distinguishing persons from things. Persons are rational, autonomous beings who are capable of formulating and pursuing different conceptions of the good. Persons therefore care about how they are treated; things do not. According to Kant, things can be used to suit the purpose of persons, but persons are not to be used as if they were mere things, as if they had no ends or purposes of their own. Persons have rights because of their unconditional worth as rational beings, whereas the worth of things is relative to the ends of persons.^{8a}

The apparent inconsistency in Kantian argument is that some human beings are not autonomous, yet Kant accorded them rights. Since Kant defined persons as rational, autonomous beings and not merely as human beings, he had the philosophical ammunition to challenge the anthropocentric paradigm. As Pierce notes, "a little reflection shows that a rational being in the Kantian sense and a human being - that is, a member of species of *Homo sapiens* - are not one and the same. Some human beings are not rational: fetuses, infants, the permanently comatose; some rational being may not be human being. For example, some animals may be autonomous in the Kantian sense, even though Kant denied it".⁸ Therefore, autonomy may be necessary for possession of a right to liberty, but one might ask why a being must be autonomous in order to have a right not to be tortured. The failure to take seriously the relevant criteria for the various rights is

considered a serious weakness in classical rights theories. This is because, as has been shown, autonomy, which is claimed to be the basis of equality, has little to recommend it at the level of the ethics of how humans ought to treat one another.

2.1.4 Tom Regan's Rights view

For Tom Regan, the basis of equality is inherent value, a value which people have as individuals. Regan asserts that "to say we have such value is to say that we are something more than, something different from, mere receptacles. Moreover, to insure that we do not pave the way for such injustices as slavery and sexual discrimination, we must believe that all who have inherent value have it equally, regardless of their intelligence, sex, race, religion, birthplace, and so on".⁹ According to Regan, inherent value belongs equally to those who are the experiencing subject of a life.¹⁰ And as has been seen in the first chapter, one cannot know and may never know whether inherent value belongs to rocks and rivers, trees and glaciers. But one thing is certain, according to Regan, that "we so know that many literally, billions and billions-of animals are subjects- of- a- life...and so have inherent value as we do".¹¹

Although Regan does not tell us what the defensible criterion for being a subject- of- life is, his position is that his rights view has room for the equal moral rights of different individuals because it has room for their equal inherent worth. Consequently, in Regan's view, the value each and every creature has is independent from interests those creatures may have. The basis of equality, therefore, is inherent value which is quite separate from the experiences that that being may have like the experiences of pleasure and pain among

others. Hence, Regan draws a distinction between treating individuals as if they possess inherent value, and treating individuals as if their experiences possessed inherent value. The problem with inherent value as the basis of equality is that it is impossible to make sense of the idea of an experience, of anything else, as floating and detached from all sentient creatures.

2.1.5 Peter Singer's Utilitarianism

Peter Singer is a contemporary utilitarian who, unlike anthropocentrists, holds that:

"If human beings are to be regarded as equal to one another, we need some sense of 'equal' that does not require any actual, descriptive equality or capacities, talents or other qualities. If equality is to be related to any actual characteristics of human, these characteristics must be some lowest common denominator, pitched so low that no human lacks them."¹²

What is this basis of equality that Singer is talking about? A basis of equality that no human lacks?

Singer quotes Bentham who, incidentally, was well aware that the logic of the demand for racial equality did not stop at the equality of humans. Bentham wrote:

"The day may come when the rest of the animal creation may acquire those rights which never could have been withheld from them but by the hand of tyranny. The French have already discovered that the blackness of the skin is no reason why a human being should be abandoned without redress to the caprice of a tormentor. It may one day come to be recognized that the number of the legs, the vilosity of the skin, or the termination of the *os sacrum*, are reasons equally insufficient for abandoning a sensitive being to the same fate. What else is it that should trace the insuperable line? Is it the faculty of reason, or perhaps the faculty of discourse? But a full-grown horse or dog is beyond comparison a more rational, as well as more conversable animal, than an infant of a day or a week, or even a month old. But suppose they were otherwise, what would it avail? The question is not, can they reason? Nor can they talk? But, can they suffer?"¹³

In effect, it is from Bentham that Singer had the insight that the characteristic of humans that equality ought to be related to is the ability to suffer. Singer then concludes that a being which has the ability to suffer will, of course, have some interests, at least the interest not to suffer. Singer wrote: "The capacity of suffering or of enjoying things is the prerequisite for having interest at all, a condition that must be satisfied before we can speak of interests in any meaningful way".¹⁴ Hence to this end, it is plausible to say that the basis of equality which encompasses all humans and which justifies the proposition that 'all humans are equal' is the ability to suffer or to enjoy.

Now, before an attempt is made to investigate into whether the idea of equality is relevant to the notion of animal liberation, it will be expedient to see the implication of the principle of equality for some of the practices that may lead to unequal consideration of interests of human beings like racism and sexism.

A racist is a person who holds the idea that there is a casual link between inherited physical traits and trait personality, intellect, or culture and, combined with it, the notion that their own race is inherently superior to others.¹⁵

A white racist, therefore, may believe that his race is superior to the black race. This belief allows a white racist to discriminate against the blacks on the grounds that they belong to an 'inferior' race. The Nazis, for instance, attempted to demonstrate the inferiority of the Jews by a mass of dubious biological and ethnological evidence designed to show the grounds of their inferiority.

J.C. Carothers, for example, in his book, The mind of Man in Africa, notes with regret that in recent years, scholars generally describe the conventional African mentality with reservations, despite the truth.¹⁶ "These description are by no means false. They represent a facet of the truth and as such must be recorded."¹⁷ He then goes on to describe these views. He begins to quote at length from the works of neuropsychiatrists. The two had the following to say:

The best known trait of the normal psychology of the African are, above all, the importance of the physical needs, nutrition, sexuality; and liveness of the emotion which is counter-balanced by their poor duration. Sensations and movements comprise the chief part of their existence. Intellectual life, evocation of the past, and projects of the future pre-occupy him but little. Separated from these regulating influences, the lives essentially in the present (in this sense like a child), and his conducts submit to influence of impulses of the passing moment and thus appears explosive and chaotic.¹⁸

Another French writer from whom Carothers quotes is Barbe. He summarizes the African mentality as follows: "In the field of intelligence, an inaptitude for that which appears to be its essential function: co-ordinating of the parts of a whole, perceiving abstract relations particularly mathematical".¹⁹

Williams writing about Africans of the Gold Coast (now Ghana), states that:

Compared with the white races he seems to lack initiative and constructive ideas, although he may be a shrewd judge of the attainment of others... power of observation is astonishingly defective...they seem to be incapable of sustained effort...an African has little imagination and little humility. His self-esteem is often ludicrous...the qualities most in need of education are imagination and judgement.²⁰

Carothers, in conclusion, in his own words, summarizes the following attributes of the African:

The African is highly conventional: highly depended on physical and emotional stimulation; lack in foresight, tenancy, judgement and humility; inapt for sound abstraction and for logic; given to fantasy and fabrication, and in general, as unstable, impulsive, unreliable, irresponsible and living in the present without reflection or ambition, or regard for the people outside his own circle.²¹

I will not go at length commenting on the above attributes of the African as articulated by the above gentlemen. The point worth making is that due to such notions, it is maintained that in respect of some particular relevant attribute, Jews (or might be Negroes, or blacks, according to the basis of the distinction proposed) are inferior to other races and that this justifies discrimination against them.

The above argument is vulnerable on the possible grounds that the evidence will not support the claim that all Jews or Negroes or Africans are, in given respect, inferior to Nazis or white men. As Singer says, we differ as individuals...there is no morally significant differences between races.²² Even the tests conducted by the Nazis did not prove that all the Nazis were better than Jews in these respects. Some Jews were better than some Nazis in intelligence and other abilities. The differences between individuals do not adhere to racial lines. Furthermore, the respects in which races differ is irrelevant to some, if not all, forms of discrimination made to rest upon them; and finally, where the differences are relevant, the degree to discrimination is out of all proportion to the degree of the differences.

Racists can still argue that they are closer to members of their own race than they are to members of other races. This is because they believe that on average, their own race is superior to other races. Members of the supposedly 'superior' race are closer to one

another than they are to members of so-called 'inferior' race. A racist may then continue to argue that we are, typically, always more 'in debt' to family than to friends, more indebted to friends than to acquaintances and so on. In the same way, we identify most fully with those closest to us; their interests are more 'real' to us in a way that the interests of more distant people are not. The interests of those close to us, the interests communicated to us directly - have vividness and immediacy.²³ For this reason, a racist may feel justified in giving greater weight to the interest of the members of their own race when there is a clash between their interests and interests of those of another race.

The above argument which racists give to justify why they discriminate members of other races is based on an assumption that there are 'superior' and 'inferior' races. But, even if they are, not all members of 'superior' race are superior to all members of 'inferior' race. As Singer says we differ as individuals and not as races. Therefore, in considering interests, we should not separate those who are close to us from those who are far from us. This is because the prerequisite for having interests is the ability to suffer or to enjoy. If a human being suffers, there is no moral justification for refusing to take that suffering into consideration. No matter what race one belongs to, the principle of equality requires that the sufferings be counted equally with like sufferings.²⁴ Therefore, giving more weight to the interests of those who are close to us can be an act of empathy, which can go against the principle of equality. So there is no moral justification for a racist to give more weight to the interests of the members of their own race when there is a clash between their interests and those of another race. To do this is to violate the principle of equality.

The same argument for equal consideration of interests can be used against the parallel case of sexist stereotyping which sees women as more emotional, less rational, less enterprising and less aggressive than men.

If we take, for instances, the issue of aggressiveness we find that it has been proved by the psychology of sex differences that males are more aggressive than females in all human societies in which the differences have been studied; that similar differences are found in apes and other closely related animals; that the differences are found in very young children, at an age when there is no evidence of social conditioning in this direction; and that aggression has been shown to vary according to the level of sex hormones, and that females become more aggressive if they receive male hormones. For this, reasons it may be argued that it is not due to sexual discrimination that males hold most of the leading positions in politics, business, universities and other areas in which people of both sexes compete for power status.²⁵

This argument in favor of sexist stereotyping can be refuted on the grounds that while there are admitted physical and psychological differences between men and women, there is no evidence that women are generally inferior to men in intelligence, business capacity, etc, and therefore, discrimination resting on such assumed inferiorities are ill ground; and that the admitted differences will not support discrimination between sexes, for example, in respect of entry into professions, educational opportunities etc. Whatever distinctions are made in any of these respects should depend on criteria applying alike to

men and women so that the aggressiveness of men, as given by proponents of sexism, can only be offered as an explanation rather than as an ethical justification of the fact that males hold most of the leading positions in society.

Moreover, as Boxil puts it:

The principle of equal consideration does not presuppose any factual equality among individuals, for example, that they are equal in intelligence, or rationality or moral personality. Consequently, it is not contradicted by the fact that some people are more talented than others and does not have to be withdrawn because of that fact. It is fundamental principle. It say that whatever the differences between people are, equal weight ought to be given to their like interests.²⁶

In this line of thought, Boxil is in agreement with Singer. Singer adds that these interests are: "avoiding pain developing ones abilities, satisfying basic needs for food and shelter, enjoying warm and personal relationships."²⁷ etc.

Now since animal liberationists, Singer included, believe that whereas a racist gives greater weight to the interests of the members of their own race when there is a clash between his interests and those of another race, a speciesist gives greater weight to the interests of their species whenever there is a clash between their interests and those of another species, and that speciesism, therefore, is a systematic discrimination based on species membership which is morally analogous to racism and sexism, what follows is an attempt to find out whether the idea of equality is relevant to the idea of animal liberation.

2.2.0 The Relevance of the Principle of Equal Consideration of Interests to the Idea of Animal Liberation: A Critique of Singer's Position

Contractarianism, Anthropocentrism and Kantianism could be hard views to refute when it comes to the moral status of animals if they were adequate theoretical approach to the moral status of human beings. But since they do not provide us with a sound basis of equality that encompasses all humans, their adequacy in respect to equality for animals becomes questionable. As for Regan, being a subject of life and thus possessing inherent value is the basis of equality but the challenge he faces is whether a being that does not have interest can have inherent value? This is a question that will be returned to later. Singer's argument that the basic principle of equality is equal consideration of interests fares better when it comes to equality for humans but can it stand up under the heat of fair criticism when it comes to equality for animals? This is an issue worth further investigating.

Singer suggests that our current attitude are 'speciesist' a word intended to make one think of 'racist' or 'sexist'. The idea is that membership in a species is in itself not relevant to moral treatment and that much of human beings' behaviors and attitudes towards animals is simply based on this irrelevant fact. But Bonnie Steinbock²⁸ notes that there is an important difference between racism or sexism and 'speciesism'. According to Steinbock, we do not subject animals to different treatment simply because they have furs and feathers but because they are in fact different from human being in ways which would be morally relevant. But which ways are they? In Steinbock's view "while we are not compelled to discriminate among people because of different capacities, if we can find a

significant difference in capacities between humans and animals, this would serve to justify regarding human interest as primary.²⁹

There is a problem with Steinbock's support of unequal consideration of interests when there is a clash between human and animal interests. This is because there are certain animals with the capacity for awareness, planning, among others, more than some humans e.g. those humans who are perpetually comatose, those with irreparable mental damage incompatible with recovery of consciousness, among others. Now if consideration of interests should depend on that being's capacities, does it mean that one should give more weight to the interests of the animals with the above mentioned capacities when their interests clash with those of a comatose?

Therefore, what the term 'speciesism' has in common with terms 'racism' and 'sexism' is the reference to focusing on a characteristic which is, in itself, irrelevant to moral treatment. Singer aims at bringing to light a new understanding of equality, which has profound and rationally defensible basis. If the basis of equality is the ability to suffer then there is no reason for failing to extend equality to animals.

Another criticism on Singer's utilitarianism is from Tom Regan, a contemporary of Singer. Regan's claim is that "utilitarianism has no room for the equal moral rights of different individuals because it has no room for their equal inherent worth. What has value for the utilitarian is the satisfaction of an individual's interests, not the individuals whose interests they are".³⁰

To rebut Regan's claim, it is, for sure, the case that there is no way one can separate the valuable experiences of goats from goats themselves. One cannot even make sense of the idea of an experience, of anything else floating around detached from all sentient creatures. Hence, the distinction between treating individuals as if they possessed inherent value, and treating them as if their experiences possessed inherent value, is much more problematic than one might at first glance suspect.³¹

Therefore, it is plausible to conclude that respect for inherent value of subject of life is not a reason for embracing the rights view (of Regan) rather than the Utilitarian view. The principle of equal consideration of interests, which is the foundation of utilitarianism as well as of many other ethical views fully satisfies the demand that one recognizes the inherent value of subjects-of-a-life. And as Singer put it:

Right-based ethical theories are too inflexible to respond to various real and imaginary circumstances in which we want to make moral judgements. Regan's view is unable to provide adequate ground for moving beyond equal consideration stance, to a view based on right. In the absence of any such grounds, there is no case for attributing rights, rather than equal consideration, to animals.³²

But a questions still remains; can animals be liberated if they do not have rights the way Singer argues? According to Singer, rights-based theories are too inflexible to be practical. And as Niall Shunk has noted:

Although Singer occasionally uses the phrase "animal rights", he has made it abundantly clear that as a consistent utilitarian, he prefers not to speak of animal rights or of human rights for that matter. Speaking of rights introduces what appears to be a strong anti-utilitarian consideration into moral reasoning: that is when people say that humans have rights, they are claiming that there are certain things that cannot be done to the right holder.³³

If rights are to be taken in the preceding sense then there is every reason to support Singer's utilitarian claim. To say that a human being or an animal has inviolable right is to be unrealistic. This example will serve to illustrate the preceding claim. Suppose it has been learnt that some one is hiding a bomb under a Nairobi City building basement and that it is not known when the bomb will explode. If by torturing the terrorist he will show us where he has planted the bomb. Now, even if this torture may lead to his death afterwards, and, if, he can only tell us where he is hiding the bomb if he is tortured, wont it be right to torture the terrorist even if he has a right not to be tortured? It will be the right thing to torture the terrorist and it will be absurd to say that by the very fact that he has inherent value as a person he ought not to not be tortured. The principle of equal consideration of interests will demand that the terrorist be tortured. Now why talk about animal rights if rights theory does not seem to hold water?

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It will still be right to talk of animal rights for the following reasons. According to John Finns, a right is a justifiable claim on legal or moral ground to have or to obtain something or to act in a certain way. In its broader sense, we can also talk of the right of one to act in a certain way, the right that somethings should be done to him, and the right that certain things should not be done to him.³⁴ It is the latter point which is of concern. Animals, it can be asserted, have rights that certain things should not be done to them. According to Sprigge:

The real issue is this: Are there certain things which it is wrong to do to animals for essentially the same reasons as it is wrong to do them to humans? If there are and if we talk of the rights of humans in this connection, it is right to talk of the rights of animals in this connection too. If we say, as some propose, that it may be bad to treat animals in a way that deprive them of the opportunity to live a fulfilling life, but that it is misleading to talk of rights here, that suggests that there is some

radical difference in why it is wrong to do this to humans and why it is wrong to do them to animals.¹¹

Hence, the point which Singer, perhaps, did not take note of and which is worth putting a cross is that animals have rights. Their rights will, roughly, things like: that all sentient beings have a right to live out their lives according to their nature, instinct and intelligence; that all sentient beings have a right to live in a habitat ecologically sufficient for normal existence; and that all sentient beings have a right to be free from exploitation.

The second point is about how to reconcile the idea of animal rights and the principle of equal consideration of interests. The problem here seems to be about which precedes the other, rights or equal consideration of interests?

The word 'right' points attention to individuals who are said to have the rights, and indicates that there is something about them which should call forth a certain response in human beings. If one says that we have duties towards animals, or for that matter our fellow humans (at least the duty to have their interest equally considered) but that they do not have rights (that their interests be equally considered) one does not adequately centre attention on what it is about which makes us have these duties. For after all it is in virtue of the very special status in the world which conscious creatures have that we have these duties, namely, that they are creatures who can feel pleasure and pain, fulfillment and frustration, hope and fear.

Animals have rights but these rights do not precede equal consideration of interests as Regan contends but on the contrary equal consideration of interests precedes rights. Rights are, therefore, dependent on equal consideration of interests and can be overridden as the principle of equal consideration of interests might dictate. So, contrary to Singer's assertion, animals have rights but in agreement with Singer, equal consideration of interests is primary and prior.

2.3.0 CONCLUSION

In this chapter we have endeavored to see if there is any connection between animal liberation and the idea of equality. In order to do this, we started by tracing the basis of equality. Various theories, which purport to offer the basis of equality, have been explored. The general anthropocentric paradigm, contractarianism (Rawls in particular), and natural rights theory (as explicated by Kant), have little to recommend them at the level of ethics of humans and so it is highly dubitable if they have anything to recommend them when it comes to the ethic of how humans ought to treat animals.

Tom Regan's rights view also has its own problems. In Regan's view, values inherent in a creature are different from interests that that creature may have. And so the problem with inherent value as the basis of equality is that it is impossible, to make sense of the idea of an experience, of anything else, as floating and detached from all sentient creatures.

According to Singer, the basis of equality is interests. The prerequisite for having interest is the ability to suffer and or to enjoy. The principle of equal consideration of interests gives a sound base from which to argue that all humans are equal. What the term 'speciesism' has in common with terms 'racism' and 'sexism' is the reference to focusing on a characteristic, which is, in itself, irrelevant to moral treatment. The principle of equal consideration of interests is thus relevant to the idea of animal liberation.

To reconcile Regan's and Singer's views, we have seen that although one can talk of animal rights, the principle of equal consideration of interests is primary and prior to the notion of rights. So we have duties to animals but animal interests weighed against human interests will dictate the kind of duties humans have to animals.

Some issues are still hanging. If the precondition for having interest is ability to suffer, how can one know if an animal is suffering? How can one know what an animal will desire in a given situation? Furthermore, it is believed that interests are tied to one's ability to articulate her interests which animals, normally, are not capable of. In the chapter that follows (Chapter three) we are going to deal with the above issues under the title, "Reasons for and Against Liberating Animals".

Notes

- ¹ Peter Singer, 'Animal Liberation' in People, Penguins, and Plastic Trees: Basic Issues in Environmental Ethics (Boston: Wardsworth Publishing Company, 1995), 51
- ² P.A. Woelfl, "Application of Equality" in The New Catholic Encyclopaedia (London: McGraw Hill Company, 1966), 502
- ³ Peter Singer, Practical Ethics (Cambridge: Cambridge University Press, 1979), 4
- ⁴ John Rawls, A Theory of Justice (New York: Harvard University press, 1971), 506
- ⁵ Ibid., 510.
- ⁶ Christine Pierce and Donald van De Veer, Basic Issues in Environmental Ethics (London: Wardsworth publishing company, 1995), 7.
- ⁷ Ibid., 9
- ^{8a} Immanuel Kant, "Duties to Animals and Spirits" in Lecturers in Ethics. Translated by Louis Infield (New York: Harper and raw, 1963), 238
- ⁸ Ibid., 17
- ⁹ Tom Regan, "The Case for Animal Rights" in People, Penguins, and Plastic Trees: Basic Issues in Environmental Ethics (Boston: Wardsworth publishing company, 1995), 76.
- ¹⁰ Ibid., 77
- ¹¹ Ibid, 78
- ¹² Peter Singer, "All Animals are Equal" in Animals Rights and Human obligations, Tom Regan and Peter Singer eds. (Englewood Cliffs, New Jersey: Prentice Hall, 1989), 81
- ¹³ Peter Singer, "Animal liberation" op. cit. 52
- ¹⁴ Peter Singer, Practical Ethics (Cambridge" Cambridge University press, 1979), 50
- ¹⁵ Encyclopedia Britannica, 15th ed. (Chicago: Encyclopedia Britannica, Inc, 1979)
- ¹⁶ Dr, John Coln Carothers lived a considerable part of his life practicing general medicine in Kenya. He later took up psychiatry and was assigned as a specialist psychiatrist in charge of Mathare mental Hospital in Nairobi - Kenya
- ¹⁷ John Colen Carothers, The Mind of Man in Africa, (London: Tom Stanley, 1972), 93.
- ¹⁸ Ibid., 93
- ¹⁹ Ibid., 95
- ²⁰ Ibid.

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- ²¹ Ibid. 96
- ²² Peter Singer, Practical Ethic, op. cit., 17-18
- ²³ Lawrence C. Backer, "Priority of Human Interests, in Animal Rights and Human Obligations ed. by Tom Regan and Peter Singer, Englewood cliffs; Prentice Hall, 1989), 92.
- ²⁴ Peter Singer, Practical Ethics, op. cit., 17-18
- ²⁵ Peter Singer, Practical Ethics, (Cambridge: Cambridge University Press, 1993), 34
- ²⁶ Bernard R. Boxil, "Equality, Discrimination and preferential Treatment", A companion to Ethics ed. Peter Singer (New York: Blackwell publishers, 1991), 335
- ²⁷ Singer, Practical Ethics, published in 1993, op. cit., 31
- ²⁸ Bonnie Steinbock, "Speciesism and the idea of Equality" in Morality and Moral Controversies, John Arthur, ed. fifth ed. (Upper Saddle River, New Jersey: Prentice Hall, INC, 1999), 141
- ²⁹ Ibid, 144
- ³⁰ Tom Regan " The case for Animal Rights" in People, Penguin and Plastic Trees: Basic issues in Environmental ethics (Boston: Warsworth publishing company, 1995), 75
- ³¹ Peter Singer, "Animal Liberation" in People, Penguins and Plastic Trees. Op. cit., 84
- ³² Ibid.
- ³³ Shunk, op. cit. 224
- ³⁴ John Mitchel Finnis, "The foundation of human rights" in The TCU International Quarterly
- ³⁵ Timothy L.S Sprigge, "Do Animals Have Rights" in The St. Andrew Animal Fund 10 Queensferry street, Edinburgh, pg.3

CHAPTER THREE

REASONS FOR AND AGAINST LIBERATING ANIMALS

The idea of animal liberation is contentious. Whereas the proponents of animal liberation try to state their case clearly, to state issues at stake as clearly as possible so that people may know what they are being invited to accept, the opponents of animal liberation tend to argue that there is something fundamentally wrong with the whole concept of animal liberation, that the arguments in support of animal liberation are either based on false premises or are fundamentally flawed.

In this chapter an attempt shall be made to examine the reasons presented by those who are pro and those against the idea of animal liberation. The contentious points with regard to animal liberation, and which shall be dealt with in this chapter are; whether animals can suffer; whether animals really have interests; and since the prerequisites for having interest are taken to be ability to express the interests using a language, ability to have categorical desires especially for a being to experience death as a misfortune, arguments in support and against the above stated 'Conditionalities' for having interest shall be presented. Finally the idea of moral community shall be explored. Once again, since the preconditions for belonging to moral community, it is argued by the opponents of animal liberation, are ability to reciprocate and relations requirement, among others, an attempt shall be made to assess how rationally defensible the preceding criterion for membership in moral community are.

3.1.0 ANIMALS AND THE IDEA OF SUFFERING

In this section, an attempt shall be made to appraise the concept of suffering as applied to animals. Since the bone of contention when agitating for animal liberation is that animals are capable of suffering, the task here is to find out proofs for the idea that animals do suffer. We shall start by examining the physiology of suffering. Secondly, since physiological state of a being can be manifested in that being's behaviour, further attempt shall be made to find out the relationship between behaviour and suffering. Finally, since, for many people, at the root of the belief that animals do suffer are the analogies between animals and humans, there shall be an endeavour to further base our studies on the similarities between humans and at least some other species.

3.1.1 The Physiology of Suffering

Not a few people hold the idea that the physiological state of a being can provide the evidence on whether a being is suffering or not. The problem here is to decide what to measure, that is, which physiological variables give the best indications of suffering. We begin this Section by looking at the reactions that occur in animals that are physically harmed or in danger, for it is these that will enable us to understand where the idea of "stress" comes from, and what its relation to suffering might be. But before we proceed, it would be better to define the terms, "stress" and "suffering".

According to Dawkins, "suffering" ... refers to a wide range of intense and unpleasant subjective states of people or other animals, such as fear and frustration. 'Stress' on the other hand, usually refers to a series of physiological changes, such as release of

hormones, which go on within the body when an animal is subjected to injury, extremes of temperature, and so on."¹ We now proceed to have a look at how stress can be measured.

From his studies, Cannon, a physiologist, has found out that when an animal is suddenly faced with a situation in which it has to take some sort of rapid action such as running away or putting up a fight, its body changes in certain ways to meet the emergency. It breathes deeply to take in extra oxygen. The heart beats faster so that oxygen can be pumped more quickly to the tissues that need it. The liver releases sugar to fuel the muscles that will be used for fighting or running. This all happens very quickly, in a matter of a few minutes or seconds and Cannon called it the "General Emergency Reaction"² From biology, it is also a general knowledge that it is due to the activation of a special part of the nervous system, the sympathetic nervous system and of the hormones such as adrenaline and nonadrenaline which leads to this General Emergency Reaction. And very often, when the animal's emergency resources are mobilized, it flees or fights off the source of danger and can then resume its normal and peaceful activities. The problem is: how about if the source of danger is not removed like in the case of animals that are confined in a small cage or animals being transported for a long distance like baboons being transported from the Jungles of Africa to Laboratories in Europe and United States of America?

As Dawkin's further observes, if the source of the danger is not removed,

The General Emergency Reaction will be continuously aroused, but to no avail. Then, its body begins to react in a rather different way. A new set of hormones is created. The most characteristic of these is ACTH (adreno-cortico-trophic-hormone) which is secreted by the pituitary gland at the base of the brain. The presence of ACTH in the blood is therefore a good indication that this second stage, sometimes known as the 'resistance' stage in the organism's response to the danger has begun ... ACTH stimulates the adrenal glands to produce a number of hormones, such as cortisone and hydrocortisone. These, in turn, help to keep the body provided with energy in the form of sugar. In this sense, the body's response is adaptive, maintaining the animal in a state of readiness to combat the source of harm. Eventually, if the danger continues, the animal enters the final or 'exhaustion' stage of its response and its adaptive mechanisms start to break down altogether. The activity of various glands, such as the thyroid, begin to decline ... The blood itself changes in subtle ways, gastric ulcers may appear and organisms may become unable to resist infection. Infact, most of the organs of the body change in some way, usually to degenerate.³

As is the case this degeneration is characterized by changes in liver, spleen and in body temperature, among others. Gastric ulcers, for instances is a disease of stress.

It is thus evident that stress which is physiological changes may grow into suffering. According to Archer, a physiologist and biologist, "stress is the prolonged inability to remove the source of danger."⁴ Physiological states which are called "stress" may accompany subjective states of 'suffering'. Archer further observes that many animals including rats, voles and mice show some "stress" symptoms when they are crowded together in small space. In particular, they show enlarged adrenal glands typical of the second, resistance, stage of the General Adaptation Syndrome. This has suggested that overcrowding causes these animals to suffer, even when they appear to be physically healthy.⁵ As Hails also asserts, the deaths of many animals which occur while they are being transported is also thought to be due to extreme stress symptoms. For example,

many transport deaths in pigs are from acute dilation of the heart. Hails suggests that this is a result of the increased blood flow that occurs during the early part of General Adaptation Syndrome.⁶

In brief, it has been seen that physiology holds out great promise for the assessment of suffering in animals because it can tell us what is going on beneath the skin, perhaps before any overt signs of ill-health are apparent. Physiological measurements such as those of heart rate or hormone levels can give an hour-to-hour or even moment-to-moment indication of changes in an animal's responses which would be hidden from the unaided observer. But on the other hand, as Dawkins notes, physiological measurements have two serious conceptual problems. She thus states them:

These are, first, what should be measured and, second, how to relate what is measured to the degree of suffering experienced by the animals.⁷

Dawkins' assertion is true because the identification of the 'stress' syndrome of the General adaptation unit has gone some way to answering the problem of what to measure. But it has not supplied complete answer, since emotional states are complex and may not necessarily correlate closely with the relatively simple physiological variables that have been measured so far. Nor has it answered the problem of calibrating suffering with physiological measurements. But indeed, what exact levels of hormone or other physiological variables should be called 'suffering' is not clear. Moreover, the term "stress" itself has caused so much confusion and been used in so many different ways that it may have lessened the contributions that physiology might have to the assessment of an animal's welfare. It is for this reason that a further study on the concept of animal

suffering is called for. At this other level it is expedient to find out if animals have particular signs that they give when they are experiencing unpleasant emotions. Since these signs could be manifested in the animal's behaviour, we therefore dedicate the step to "Behaviour and Suffering".

3.1.2 BEHAVIOUR AND SUFFERING

From the onset, it is clear here that the difficult necessity which needs to be addressed is how to interpret the language by which animals express their subjective feelings. In this section, an attempt shall be made to look at three somewhat different ways in which people have attempted to answer this question and then at the difficulties that they have encountered. The first way that shall be discussed arises directly from physiological approach. The second way is the one which assumes that animals may suffer even when physiological disturbances have not been looked for. The suffering might arise, for example, because the animal was fearful or because it was prevented from doing an action that it is strongly motivated to do. Thirdly, the approach that derives mainly from observations on captive animals, such as those in Zoos, which show highly 'abnormal' behaviour including biting their own tails and feet down to the bone.

The first way, as has been stated above is the idea that behaviour changes at the same time as the animal is physiologically, going through the resistance and exhaustion phases of the General Adaptation syndrome, as Archer puts it, "the precise way in which behaviour changes is very variable."⁸ According Barnett, behaviour change "may include increased aggressiveness".⁹ And Bareham found out that "in chickens, for

instance, individuals with the largest adrenal glands do the most of a particular action called 'head flicks'.¹⁰ But in other species completely different actions are diagnostic of underlying physiological events.

The second way tries to answer the question on whether animals may suffer even when physiological disturbances have not been looked for. This, can be determined by establishing animals strangest responses to conflict and frustration. Masserman describes some examples of what have been called 'experimental neuroses' in cats. One of his experiments involved training cats to press a switch to obtain food. At first, he reported, the cats appeared to be very "happy" with these arrangements. They ran into the laboratory and purred while they pushed the switches. But then Masserman subjected them to various frustrations such as switches which did not work. The cats responded by pushing down everything in sight, including saucers and other cats and they became extremely agitated.¹¹ There are similar behavior patterns which animals show when they are known to be in conflict or frustrated. As Dawkins has remarked, "the persistence of behavior associated with conflict also suggests that adaptive mechanisms are being overworked."¹²

Finally we come to the aspect called "Abnormal Behaviour" of animals. According to Bradhurst, amongst others, abnormal behaviour means a persistent, undesirable action, shown by a minority of a population which is not due to any obvious damage to the nervous system and which is generalized, that is, not confined to the situation that

originally elicited it.¹³ Fraser adds to this definition that the behaviour should be maladaptive or damaging to the animal.¹⁴

It may not seem obvious how abnormal behaviour differs from the kinds of behaviour already discussed but it may not differ at all. The reason for making a distinction is not because at this level a whole new category of behavior is going to be discussed, but because different assumptions are made about the way in which mental state is related to behavior. This is because the moment a behavior is labeled 'abnormal', it becomes almost impossible to separate its occurrence from the implication that the animal doing it must be suffering.

As Morns puts it, "there is one sort of abnormal behaviour which almost everyone agrees is a sign of severe suffering, namely when it results in actual physical damage, or death."¹⁵ Thompson et al, for example, observed that, "Scottish Terriers which have been reared in isolation, show a bizarre 'whirling behavior'".¹⁶ Berkson also notes that "Rhesus Monkeys which have been reared in isolation typically crouch in a corner, rocking to and fro biting their own tails and genitalia."¹⁷ But amidst all these what may appear to be the evidence of animal suffering, there is still the difficult necessity to be addressed: How to relate behavior to the degree of suffering as a subjective state.

Well, in order to determine whether an animal is suffering, the behaviour associated with physiological "stress" and with fear, conflict, frustration and so on are useful guides, but well-being cannot be equated with the complete absence of any of them. Moreover,

'abnormal' behaviour poses even more problems because it is such a wide term, although it may be possible to learn about the factors which gave rise to such behaviour and thus come closer to learning about the subjective state of the animal.

There are two main ways in which people have attempted to come to terms with the problem of calibrating the degree of suffering which an animal experiences with its behaviour. One way, which can be called 'hard-line' criterion, is to say that no behaviour can be used as evidence that an animal is suffering unless it can be shown to involve physical ill-health or to be a precursor of it.¹⁸ Many people, on the other hand feel, however, that the hard-line criterion is inadequate. They believe that animals suffer even when there is no evidence of physical ill-health, present or impending. They therefore have to decide how much frustration, for instance, an animal can show before it should be described as suffering.¹⁹

In brief, therefore, it can be asserted that assessment of animal suffering should be based on the knowledge of the animals, concerned. As the Brambell Committee puts it: "Animals show unmistakable signs of suffering from pain, exhaustion, fright, frustration and so forth and the better we are acquainted with them the more readily we can detect these signs."²⁰ This is a hopeful view but the problem concerning the use of behaviour in assessment of animal welfare still remains. A Happy Medium has to be sought for from elsewhere. This is because even if we learn as much as we can about their behaviour, ways of expressing emotions such as fear, their powers of learning and memory and so on, none of these will supply the whole picture of what animals experience subjectively.

But there is still some hope in the aspect that has not been explored which is the idea that human assessment of the feelings of other species can inevitably rely on recognition of some similarity between humans and other species to make a final leap between what is observed directly by us and what is experienced subjectively by them. Let us proceed and have a look at this aspect.

3.1.3 ANALOGIES WITH HUMANS

Dawkins points out that there are two somewhat different ways in which people use their own feelings to make inferences about the feelings of animals. The most direct way is to observe what an animal does and to use similarities between its behaviour and their own as evidence for similarity in Mental State. The second way is more indirect i.e. the involves trying to put oneself in an animal's place thus trying to imagine oneself in the situation of the animal.²¹ Let us start with the first type of analogy: the direct way.

A chief proponent of the direct Method of analogy is Peter Singer. He holds that:

Nearly all the external signs which lead us to infer pain in other humans can be seen in other species, especially "higher" animals such as mammals and birds – writhing, yelping, or other forms of calling, attempts to avoid the source of pain and many others are present. We know, too, that these animals are biologically similar to us in relevant respects, having nervous systems like ours which can be observed to function as ours do ... The grounds we have for believing that other mammals and birds suffer are, then, closely analogous to the grounds we have for believing that other humans suffer. It remains to consider how far down the evolutionary scale this analogy holds. Obviously it becomes poorer when we get further away from man. To be more precise this would require a detailed examination of all that we know about other forms of life. With fish, reptiles, and other vertebrates the analogy seems strong, with mollusks like Oysters it is weaker. Insects are more difficult, and it may be that in our present state of knowledge we must be agnostic about whether they are capable of suffering.²²

Singer's argument is based on the fact that there are a lot of similarities between humans and some species of animals. Many signs that can make humans infer that one is suffering are present in some animals. Moreover, human's nervous system is like those of many species of animals. These issues raised by Singer are worth addressing.

To start with, analogies of this first sort carry with them the danger that people may misinterpret the gestures or sounds of the animals in front of them. For example, someone unfamiliar with the behaviour of a rat, hamster, or some other small rodent might interpret the 'freezing' gesture in which the animal crouches and remains still as showing that the animal is feeling restful or even sleepy. But freezing is a system of fear and is the way these animals frequently respond to the appearance of a predator.

It is the case that misunderstandings that arise over the meaning of animal gestures can be cleared up by greater knowledge of the particular species. But the problem still is that there are over a million species of living animals and many of them have very different ways of expressing their feelings from the way humans do. So unless humans take the trouble to study them, humans are liable to misinterpret them.

The fact that humans can deduce the fact that an animal is suffering pain due to the similarities between animals' nervous system and humans' nervous system provides a strong case for animal liberation. In his reply to Descartes who had said that animals are like machines, Voltaire had the following to say:

Barbarians seize this dog, which in friendship surpasses man so prodigiously; they nail it on a table, and they dissect it alive in order to show the mesenteric veins. You discover in it all the same organs of

feeling that are in yourself. Answer me the mechanist, has nature arranged all the means of feeling in this animal, so that it may not feel? Has it nerves in order to be impassible? Do not suppose this impertinent contradiction in nature.²³

As Hubbard further contends, nerve cells of humans seem to be very similar in some animals. There are also many similarities in the brain structure between humans and other mammals, particularly in those areas of the brain, such as the hypothalamus, which are known to be associated with emotions.²⁴

A possible ground on which to rebut the preceding argument is that it restricts recognition of suffering to animals that are anatomically and physiologically most like humans. It may actually hinder the recognition of suffering in animals which experience similar emotional states, but have different brain structures responsible for them. Just as people of different nationalities can express the same idea in different languages, so animals may be able to experience similar states or perform similar behaviour, with different sorts of nervous system.

Analogy of the second sort – that which entails humans trying to put themselves in an animal's place, trying to imagine what it might be like to be an animal in a particular situation, may even be more dangerous. The dangers come not from attempting to imagine what the animals might be feeling, but from imaging the situation through human eyes and ignoring basic biological facts of the animal. Infact the baffling question is: Can humans really devise ways of finding out about animals suffering from the animal's point of view?

As a conclusion on this section which has been dealing with analysis of the idea of whether animals can suffer, we have seen that physiology can tell us what is going on beneath an animal's skin perhaps before any overt signs of ill-health are apparent. But it was further argued that since physiological signs of suffering can be manifested in behavior; animal's behavior could probably give us a clearer picture on whether an animal is suffering. The problem once again is how much of a particular behaviour an animal must do before it can be said to be suffering. The potential of behaviour as an indicator of suffering is very great but with the knowledge that is available at present, it is not always possible to know how much behaviour corresponds to how much suffering. So, at the moment it is plausible to contend with Dawkins that, "the link between a nervous system, active movement and suffering is, of course speculative, but it is functionally plausible and it provides a basis for believing that animals can suffer."²⁵

3.2.0 ON WHETHER ANIMALS HAVE INTERESTS

It is generally held that for a being to have interests i.e. interests as desires then that being should be able to formulate its desires using a language, that that being must be rational and that it must have a reason for living if death is to be a misfortune to it. In this section an attempt is made to examine the above claims with regard to animals.

3.2.1 Interest and Language

The person who has given an in-depth and rigorously sustained argument with regard to the idea that Animals do not have interests is R.G. Frey; Infact his is a clear case against animal liberation. Frey's argument goes as follows. Only beings with interest can have

moral rights. Interests must logically be divided into needs and desires. If interests refer to needs then plant, tractors, and other mere things can have them since tractors need oiling and plants need water, among others. But if interests refer to desires, then animals cannot have them and consequently cannot have moral rights. Animals cannot have desires because having desires requires belief, and belief requires linguistic ability but animals lack linguistic ability.²⁶ Frey's claim, therefore, is that since animals cannot have interests in the real sense (interest as desires), the idea of their liberation is absurd. In his own words, as an example, Frey puts it this way:

Suppose I am a collector of rare books and desire to own a Gutenberg bible: my desire to own this volume is to be traced to my belief that I do not own such a work ... Without this belief I would not have this desire that my collection lacks Gutenberg bible; that is I believe the Sentence "my collection lacks a Gutenberg Bible" is true. In the Constructions of the form "he believes that ..." what follows upon "that" is a declarative sentence, and what the "he" in question believes is that the sentence is true. The difficulty in the case of animals should be apparent: if someone were to say, e.g. "the cat believes that the door is locked," then that person is holding, as I see it, that the cat holds a declarative sentence "the door is locked" to be true; and I see no reason whatever for crediting the cat or any other creature which lacks language, including human infants, with entertaining declarative sentences and holding certain declarative sentences to be true ... If what is believed is that a certain declarative sentence is true, then no creature which lacks language can have beliefs; and without beliefs, a creature cannot have desires. And this is the case with animals, or so I suggest; and if I am right, not even in the sense, then, of wants as desires do animals have interests ...²⁷

Frey's argument can be rebutted in the following manner. For interests to be ascribed to a being, that being must have affective needs which generate interests. Interests cannot be ascribed to a tractor, for instance, because it does not have affective needs.

But Frey goes ahead to say that animals lack desires (affective needs) because they lack the belief that they have these desires and that if they had these desires then they could be in a position to formulate declarative statements about their beliefs.

On the contrary it can be argued that whether animals are capable of believing is different from whether they can formulate or understand belief statements. It is not unusual to say that the hen realizes that one of its chicks is missing or the baboon sees that strangers are invading its territory. In saying such things one does not presume that the hen, for example, thinks of the sentence, 'one of my chicks is missing' and that it could assent to that sentence, if asked whether it is true. And as S.F. Sapontzis puts it. "ordinary usage does not support the claim that if an intentional verb takes a sentence for its object, then it properly applies to only those capable of understanding sentences"²⁸. Hence it is questionable whether infants, animals and other non language users must be capable of understanding sentences for intentional verbs to be applicable to them.

Freys point does not stop at belief level and he goes further to assert that:

"I do not see how a creature could have the concept of belief without being able to distinguish between true and false beliefs. When I believe that my collection of rare books lacks a Gutenberg bible, I believe that it is true that my collection lacks a Gutenberg bible, put another way, I believe that it is false that my collection has a Gutenberg bible.... As for the cat and now leaving aside all the questions about the relative sophistication of concepts, I do not see how it could have the belief that the door is locked unless it could distinguish this true belief from the false belief that the door is unlocked."²⁹

At this point Frey's position has driven the argument to the notion of language and truth.

And the question to be asked is: is it the case that only sentences can be true or false?

Since currency, perceptions friends, among others, can be true or false, sentence does not seem to be the only things that are true/false in the way sentences are. As Sapontzis put it:

If we accept the correspondence theory of truth for sentences, then portraits are true/false in ways sentences are. If we adopt a coherence theory of truth for sentences, then omens, perceptions and impressions are true/false in the way sentences are, if we adopt pragmatic theory of truth then examples, tools, signs are true/false in the way sentences are. Thus there would seem to be sets of things that are true/false in the way sentences are, no matter how we interpret the latter. Beliefs may be just another set of things that are true/false in the same way sentences and other things are. So even if beliefs are true/false in the way sentences are, we cannot infer that beliefs are about sentences.³⁰

From the above argument, as put forward by Sapontzis, it can be inferred that if one is asked what makes a belief true, the common answer would not be, "A belief is true if all what is believed is true" but "A belief is true if what is believed is the case." This suggests that what is true/false here are beliefs, with what is believed being that something is or is not the case. And, of course, as Frey himself acknowledges, the sorts of things that are or are not the case are not sentences but states of affairs. Thus, the place of truth or falsity in the analysis of beliefs, belief statements, and statements and questions about beliefs is at least not as clear and probably other than Frey suggests and his arguments requires.

Thus Frey fails to demonstrate that language is required for belief. Consequently, he fails to demonstrate that animals cannot have beliefs. Therefore the conclusion Frey reaches that animals do not have desires and consequently interests is unfounded.

3.2.2 INTEREST AND RATIONALITY

Contemporary opponents of animal liberation have made a distinction between taking an interest and merely having an interest. Taking an interest has a rational dimension whereas “merely” having an interest does not. This is because only beings with normal intelligence can have epistemic relations to what is in their interests and hence take an interest.³¹ Since animals do not have normal intelligence, they do not take interests, an activity which requires understanding that something is the cause of something else.

On the contrary the following example is meant to show that some animals can take interest since it purports to support that they can associate ideas and relate them to what they want.

On March 21, 2000 it was reported in Daily Nation, a Kenyan Newspaper, that there was a drama at Tabaka Trading Centre, Kenya, when monkeys and villagers clashed over relief water delivery. Ten villagers were hurt and eight monkeys killed in the two hour duel between men and animals. Trouble started when three water tankers bringing in water from neighbouring Elwak town to the drought stricken area arrived at the trading centre. The monkeys then attacked villagers who were drawing water. The clawing and stone-throwing creatures are said to have sent the villagers fleeing, as they took to quenching their thirst with the villager's water. The villagers later re-grouped and armed themselves with axes and pangas and counter-attacked the monkeys. The monkeys stood their ground and fought back.³²

From the above incident, it is apparent that those monkeys were able to associate the two ideas tanker and water. That is why the monkeys came to realize there was some water around when they saw the tankers. Moreover, the monkeys stood their ground and fought the villagers because the monkeys had taken interest in water.

David Hume has the same conception of animals. He maintains that a dog, for instance, from the tone of the voice, he infers his master's anger, and foresees his own punishment. The inference he draws from the present impression is built on experience and, on his observation of the conjunction of objects in past instances. Therefore, if one makes a beating follow upon one sign or motion for sometime, and afterwards upon another, the dog will successively draw different conclusions according to his most recent experience.³³

Darwin, therefore, is not mistaken when he observes that some animals possess memory, attention, and even some imagination and reason. But the difference in mind between man and other species of animals great as it may be, certainly is one of degree and not of kind.³⁴ Therefore the idea that only humans take interests because of their ability to reason can be brought to question.

3.2.3 ON WHETHER DEATH DOES HARM ANIMALS

Another area which needs to be looked into when finding out whether animals have interest, is by examining whether death harm them. And since Ruth Cigman gives close,

careful expression of the contention that death does not harm animals this discussion shall be focused on her argument.

Cigman's position is that:

To be a possible subject of misfortune which are not merely unpleasant experiences, one must be able to desire and value certain things. The kind of misfortune which is in question here is death, and to discover whether this is a misfortune for an animal, we must ask whether, or not in what sense, animals don't want to die.³⁵

In Cigman's view, for a being to be a subject of misfortune of death, that being must possess categorical desires. She contends that:

The subject of a categorical desire must either understand death as a condition which closes a possible future forever, and leaves behind one a world in which one has no part as an agent or conscious being of any sort... One can only understand life and death if one possesses the related concepts of long-term future possibilities, of life itself as an object of value, of consciousness, and of tragedy and similar misfortunes.³⁶

In brief, Cigman's argument is that for one to suffer the misfortune of death, two conditions must be met: firstly, one must have intellectual capacity for taking an interest in or valuing life itself; and second, one must have long-range plans.

Cigman's first argument is like this: only beings capable of valuing x can suffer the misfortune of not x . Only beings capable of suffering not $-x$ as a misfortune can have a moral right to x . S is incapable of valuing x itself. Therefore S cannot have a moral right.

Cigman's position is that it is useless to ascribe moral right to x to someone who is either unaware of x or of the possibility that she have x or a moral right to x . But on the

contrary, this question is worth asking: Is it possible for one to have a moral right to something that influences one's interests but that one is incapable of understanding and valuing? The answer is, yes. This is because categorical desires taken to be ability then fetuses, many mentally enfeebled and senile humans will lack the ability. Their death like those of animals would be no misfortune.

If on the other hand death is a misfortune to those who are sentimentally attached to the marginal humans like the mentally enfeebled, fetuses, among others, then, animals also are not left out. As is evident in many places, Itololo hill, in Tanzania, being an example, it is the case that when a baboon is killed then other baboons, around seventy or more, go and pay their last respect to the deceased member of their community. They pay this last respect by standing around the dead body of their deceased one in a sombre mood for around thirty minutes or more. The implication here is that baboons see the death of their community member as something regrettable, as a misfortune.

But Cigman has raised another issue which now needs to be addressed: that for death to be a misfortune, one needs to understand the related concepts of long term future possibilities. But does it follow that individuals who lack any grasp of long-term future possibilities have no long-term future possibilities? Moreover even if it is assumed that animals fail to have sufficiently rich grasp of long term future possibilities, as Regan puts it, "animals do have psychological identity over time... the untimely death of such an animal therefore, does cut the individuals life short... more pertinently in the sense that a particular psychological being ceases to be."³⁷

Moreover death, is a misfortune for S because it is S's possibility of enjoyment and fulfillment that is destroyed by S's death. Death is thus a deprivation of a quite fundamental and irreversible kind. It is irreversible because, once dead, always dead. It is fundamental because it closes all possibilities of finding satisfaction.³⁸ And this is true whether S is an animal or a human being. Consequently, the claim that to suffer the misfortune of death, death must be a misfortune for the one who dies does not constitute an objection to animals' death being a misfortune.

3.2.0 ANIMAL LIBERATION AND THE IDEA OF MORAL COMMUNITY

Many people believe that animals lack something of fundamental moral worth that calls for respect. This something, it is held, to be ability to participate in some kind of moral community with humans and only those who can participate in moral community with humans can be entitled to moral rights against humans. The interpretations of the preconditions for participating in moral community are reciprocity requirement and relations requirement, among others. In this section an attempt shall be made to present the strongest cases for and against the above mentioned preconditions.

3.2.1 RECIPROCITY REQUIREMENT

The argument that animal liberation opponents would put forward is something like this:

Only those who respect the moral rights of others are entitled to moral rights ("the reciprocity requirements")

Animals cannot respect moral rights.

Therefore animals cannot be entitled to moral rights.

In brief the above argument is that one is obligated to respect the moral rights of others only if the others are obligated to respect one's moral rights.³⁹ Now, since the weak may not have the ability to reciprocate for the good done to them by the strong, does it mean that the weak should be excluded from having rights against the strong?

On the contrary, it appears that the purpose of moral rights is to protect the weak against the strong, so that the weak can have a fair chance of fulfilling their interests. And it is this point which John Finnis emphasizes when he maintains that:

...reference to duties clears away some of the fog and silences some of the empty babble about rights. It returns us to the moral realism of responsibilities, justly assessed. That is why one of the great encyclicals of Paul VI, is framed in terms not of the rights of the poor, but the duties, the solemn responsibilities of the rich.⁴⁰

Going by the above assertion, giving moral rights to the weak with correlative duties for the strong but without correlative duties for the weak, would help inhibit the strong and/or strengthen the weak.

The following example will serve as an illustration of the point being put across. If Otieno is strong enough to take Apiyo's estate but Apiyo poses no threat to Otieno, then in order to protect Apiyo's interest in enjoying her estate, Apiyo needs to be given the right to the estate, with the correlative duty for Otieno to respect Apiyo's estate. However, Apiyo need not be placed under an obligation to respect Otieno's estate because, since Apiyo is too weak to pose a threat to Otieno's estate and consequently,

need not be morally inhibited in order to insure Otieno's enjoyment and utilization of his estate.

Some might prefer phrasing the conclusion as follows: Apiyo is under an obligation to Otieno, but it does not matter whether she recognizes this since owing to her weakness, Apiyo will do with that which accords with her duty anyway. And this formulation will open the door to animal liberation, since, discussing the right to life, one could equally say that Otieno's dog, Abila, has a duty to respect Otieno's life, and it does not matter that Abila cannot recognize this duty since, because of Abila's weakness, Abila will do with what accords with his duty anyway. Therefore, Otieno has a duty to respect Abila's life but Abila does not have a duty to respect Otieno's life. And so since animals are vastly weaker than humans, the reciprocity requirement should not apply to human-animal relation. It is therefore plausible to conclude that animals have moral rights against humans even if animals cannot recognize correlative duties to humans.

3.3.2 RELATION REQUIREMENT

As has been seen, utilitarianism is characterized by universal egalitarianism or impartiality. The principle of equal consideration of interests, therefore, it seems goes against what is known about common morality which points out the fact that one is not under obligation to give equal consideration to everyone.

As I have argued elsewhere in this thesis, human beings are not only permitted but also even obligated to give priority to the interests of their families, friends, colleagues and

compatriots. It is therefore not uncommon to hear people using the phrase, "my family first", implying that they have to give priority to the interests of their families. Furthermore, a world from which these non egalitarian commitments were abolished, would not be enhanced but diminished since it is these special relations to a few others that gives life much of its personal, emotional richness and fulfillment. Consequently, a moral theory based on universal impartiality must be artificial and unconvincing. Moral rights and responsibilities ought to be based on our living together, entering into familial, personal, political, economic and such other relations with each other's life. It follows that since animals cannot enter into these relations with humans, humans are not only justified in giving priority to fulfilling human interests but are even obligated to do so.⁴¹

On the contrary it can be argued that in addition to relational rights and responsibilities, common morality also contains egalitarian rights and responsibilities. In effect the relational rights and responsibilities are still in line with the principle of equal consideration of interests. The following example will clarify the point being put across.

A father, for example, is justified in giving priority to fulfilling the interests of his child but he would not be justified in giving priority to fulfilling the interests of his child by taking food from another, needy child, torturing some other innocent people or killing his business competitors. It is in this sense that in addition to relational rights and responsibilities, common morality also contains egalitarian rights and responsibilities. The issue now is whether this kind of reasoning can be extended to human dealing with animals.

Once humans get it clear that the basic principle of equality is the principle of equal consideration of interests and that ability to suffer is the prerequisite for having interest, then failure to extend the principle of equality to animals on arbitrary grounds will tantamount to inflicting unjustifiable torture on them simply because they belong to another species which is morally untenable. In effect, it would be human beings' inability to feel obligated to help relieve the suffering of animals, to treat them fairly, and so on that would prevent the extension of moral rights to animals on the grounds of this sort of moral community.⁴²

But from the principle of equal consideration, it is clear that it is not part of Community that generates our moral obligations but our sense of obligation that generates Community. So by humans extending their moral horizon, by embracing the principle of equal consideration, it is automatic that a moral Community which includes animals is created. So relations theorists should incorporate in their moral theory common egalitarian principles that counter balances humans' familial, political, speciesist and similar priorities.

3.4.0 CONCLUSION

In this Chapter, we have analyzed the arguments presented by those who accept and those who oppose the idea of animal liberation. We have dealt with three major issues: whether animals can suffer, whether animals have interests and whether they are members of moral Community.

The problem with the concept of 'suffering' as applied to animals is that even-though it is very difficult to know the subjective mental state of other species leave alone of members of human species, some animals are biologically similar to humans in the relevant respects, having nervous systems like humans' which can be observed to function as humans' do. Therefore, these animals can suffer pain. Secondly, we concluded that some animals have interests even if they appear to be lacking some abilities like rationality and use of language, which some people think presuppose having interest. Finally, reasoning led us to the conclusion that there is nothing like moral community which is unique to members of the species of Homo Sapien as such, but that moral Community is generated by human beings' sense of obligation and can be expanded in as much as human beings are willing to expand their sense of obligation, or moral horizon.

In the chapter that follows, chapter four, we shall move from the general idea of animal liberation to a particular area: animal experimentation. We shall deal with the scientific issues in animal experimentation like the probability of success in scientific ventures, Causal disanalogies, among others.

Notes

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CHAPTER FOUR

4.0 EVALUATING ANIMAL EXPERIMENTATION:

THE SCIENTIFIC ISSUES

Before appraising the moral issues in animal experimentation (done in Chapter five) it is proper to evaluate the scientific issues. This is because in determining the moral worth of animal experimentation one needs to be well versed with the scientific intricacies of the practice. Scientific issues, which need to be dealt with are, for example, the probability of success in scientific ventures which is necessitated by the fact that there exist causal disanalogies between members of different species. And, moreover, one can be confident that extrapolations from animal subjects to humans are highly probable only if one is confident that the relevant causal mechanisms in the animal are relevantly similar to those in the human.

In this chapter we start by presenting the theory of evolution as put forward by Charles Darwin and as later adopted by Claude Bernard in animal experimentation. Limitations of Darwin's theory are pointed out. Secondly, the causal disanalogies between members of different species and their implications for applied biomedical research shall be shown. Finally there will be an attempt to establish the extent to which basic animal research is relevant to human biomedical phenomena.

4.1.0 DARWINIAN THEORY OF EVOLUTION

Basically, evolution is the scientific idea of the gradual development of the various species from fewer and simpler forms. According to Charles Darwin, small changes are amplified over succeeding generations to lead to even greater diversity within the species.

Darwin puts it this way:

As each species tends by its geometrical rate of reproduction to increase inordinately in number; and as the modified descendants of each species will be enabled to increase by as much as they become more diversified in habit and structure, so as to be able to seize as many and widely different places in the economy of nature there will be a constant tendency of natural selection to preserve the most divergent offspring of any one species. Hence, during the long continued course of modification, the slight differences characteristic of varieties of the species, tend to be augmented into the greater differences characteristic of the species of the same genus.¹

From Darwin's point of view, since phylogenetically related species, say mammals, have all evolved from the same ancestral species, we would expect them to be, in some respect, biologically similar.

As Lubinski and Thompson explain:

Darwin's work suggested that to gain logical insight into human beings, it may be more illuminating to study non-human animate systems rather than the inanimate models of da Vinci and Descartes. Claude Bernard (1865) [sic], the founder of experimental medicine, used dogs in laboratory preparations as models of human physiology, assuming basic continuity in physiological functions across species. Both Darwin and Bernard argued that anatomy, physiology and behaviour not only look similar in different animals but often share common evolutionary origins and current regulatory mechanisms.²

Patton further stressed on the commonalities across species. In Patton's view, one only has to look at an account of evolution or at text books in comparative anatomy to see how much humans and animals have in common: hearts, lungs, kidneys, brains, endocrine glands, nerves, muscles, digestive systems, all built on the same plan. This homology

goes back still further as one moves down to the biological elements like the nucleus, the mitochondria or the cell membrane out of which the higher organisms are built.³ Patton's argument asserts the view that although there could be genuine differences between species, it does not undermine the legitimacy of animal experimentation. This is because any differences between species, Patton, Claude and Darwin, among others maintain are primarily quantitative and can be accounted for by the scaling formulae. As Klaassen and Eaton further put it:

The first principle is that the effects produced by the compound in laboratory animals, when properly qualified, are applicable to man. This premise underlies all experimental biology and medicine. By proper "qualification" is meant primarily that experimenter should make allowances for quantitative differences in body weight.⁴

The theory of evolution as put forward by Darwin has shortcomings when it comes to the notion of animal experimentation. This is because even though Darwin admits that there are differences between evolved species, he does not tell us how pervasive or significant those differences will be. This one brings the problem of relevance to the fore. Is it really the case that the similarities between species are pervasive and deep enough to justify extrapolations from animal test subjects to humans the way Darwin suggests? The answer is, no. This is because there is, basically, lack of isomorphism when it comes to extrapolating scientific findings from animal models to humans.

As Goodman⁵ explains it, differences in evolved species may be biomedically significant, contrary to what Darwin maintains. Goodman gives this example: Humans have evolved amino acids (biochemical adaptations) that permits oxygen to bind more firmly to fetal

hemoglobin than it does in non-primate mammals. It appears that this evolved difference has important biomedical ramifications.⁶

Darwin's mistake was that he thought that from the similarity of biological function one can infer similarity of underlying causal mechanism. In effect it is evident that Darwin did not understand the genetic underpinnings of the observable phenotypic traits. Therefore even if mammals have pervasive biochemical functional similarities, causal properties and structural features of their biochemical constitution may well differ even when they serve the same purpose.

In order to have a clear grasp of the preceding baffling and mind-boggling issue that biomedical scientists have to grapple with, let us proceed and have a look at causal analogies/dis-analogies in applied biomedical research using animals as models.

4.2.0. ANIMALS AS MODELS IN APPLIED BIOMEDICAL RESEARCH: THE CAUSAL DISANALOGIES

We have just examined the theory of evolution and have focused specifically on those elements of the theory that have significant implications for our understanding of the practice of biomedicine. Here we further clarify the standard view of the use of animals in applied biomedical research, namely, their use as analogy models of human biomedical phenomena in biomedical research. We conclude by showing how, contrary to the

common belief, most of biomedical discoveries were due to clinical and population research and other techniques and not through applied animal biomedical research.

Fox makes a distinction between basic and applied research. In applied research, the findings in laboratory animals are thought to be directly relevant to human biomedical phenomena while in basic research, findings in laboratory animals do not even pretend to be directly applicable to humans, but where those findings are thought to expand our knowledge of biological organisms in ways that may be indirectly applicable to humans, usually in unexpected way.⁷ We shall return to basic research later.

In applied biomedical research, animals are used as models. Models are conditions in animals which are supposed to be causally isomorphic to human systems they model.⁸ The claim here is not just that an experimenter makes inference from what happens to X^s in the lab to what will happen to X outside the lab but that the researcher makes predictions from what happens to X^s (some animals) in the lab to what happens to some Y^s (humans) outside the lab. In effect these researchers are engaged in some form of analogical reasoning. The basic idea of analogical reasoning, according to David Hull is that:

The behavior of a poorly understood system is assimilated to the behavior of a well-understood paradigm system. Hopefully the principles that govern the behavior of the paradigm system can be extrapolated to the poorly known system⁹.

The argument thus goes like this: X (the model) is 'similar to Y (the subject being modeled) with respect to properties {a, b, c, d, and e}, X has additional property F. While F has not yet been observed directly in Y, it is that Y also has the property F.

From the above argument, it follows that the common properties (a, b, c, d, e) must be causal properties which are causally connected with the property {F} we wish to project – specifically, {F} should stand as the cause or effect of the features {a, b, c, d, e} in the model. And this is the argument that was advanced by Darwin, Patton and Bernard Claude, among others. Bernard assumption was that one can be confident that the relevant causal mechanisms in the animals are relevantly similar to those in human beings. According to Bernard “all animals may be used for physiological investigations because with the same properties and lesions in life and disease, the same results everywhere recurs”¹⁰.

The weakness of Bernard’s assumption is that he did not take into consideration the disanalogies between the model and the thing being modeled. The question is this, are there really situations in which there are no disanalogies between the models and the thing being modeled as in the case of members of different species like humans and animals? Such lack of disanalogy will rest on the assumption that members of these different species have (always) functionally similar biochemical constitution and also that from similarity in biological function, one can infer similarity of underlying causal mechanisms. On the contrary, to the extent that one does not know the extent and significance of disanalogies, one should be less confident that the results found in the model are relevant to humans.

As Sipes and Gondolfi point out, these disanalogies may be of the following types: The first one is intrinsic disanalogy, which is due to evolution. Due to evolution, it is maintained that, causal properties (and structures and mechanisms) found in the systems of members of one species may be absent in members of another species. The second one is systematic disanalogy. This is because many biological systems are intact systems, systems composed of mutually interacting sub-systems and so evolved differences in the relations between an organism's systems may result into this (systematic) disanalogy. Finally, there are intervention disanalogies, which may arise from any causally relevant differences in the environments of animal subjects, and human populations. For example diet, lightning, bedding, among others may affect experimental outcome. Moreover, the means of inducing a biomedical phenomena of interest to an animal may not correspond to the way in which these phenomena are caused in humans. These intervention disanalogies will affect extrapolation from lab to lab and from lab to human world¹¹.

Sipes and Gondolfi summarizes on the disanalogies like this:

In summary, species differences may come at two levels: there may be evolved differences in sub-systems at any point in the hierarchy and there may be evolved differences in the relationships between these sub-systems. Thus, there will be scope for causal disanalogies, not only from the species-specific manner in which the individual sub-systems have evolved but from mutual interactions that have evolved between these sub-systems.¹²

We now proceed to have a look at some of the practical cases of disanalogies in causal mechanisms. We start with virology. As Paul explains:

Of great importance was Sabir's discovery by quantitative studies that the central nervous system of lower primates (rhesus and cynomolgus monkeys) was more susceptible to polioviruses than that of higher

primates (chimpanzees)- and by epidemiological analogy, man. The reverse was true for the elementary tract particularly in rhesus monkeys; whereas the susceptible human intestinal tract was readily infected by doses of virus that were ineffective in monkeys.¹³

In short, despite similarities between human and rhesus monkey polio, causal mechanisms of infection are very different.

Likewise, from Garret's findings, "many 'new' viruses – For instance the marburg virus is most lethal in guinea pigs and is often deadly in velvet monkeys and humans, but obviously has no effect at all in mice¹⁴."

At the moment, a case in point with regard to causal disanalogy in virology is the problematic case of Human Immune-deficiency virus. Progress in understanding the nature of Acquired Immune Deficiency Syndrome (AIDS) – its causes, symptoms and preventive measures – has been very rapid, and so far has relied almost entirely on non-animal research techniques. Population studies, microscopy, computer simulation, and post-mortem examination, clinical studies of people with AIDS, genetic sequencing and clinical trials of drugs and vaccines, have been successful research methods¹⁵.

However, scientists are still keen to develop animal model. It is an open secret that many chimpanzees and rhesus monkeys have been infected experimentally by HIV but they have not developed AIDS.. At the Institute of Primate Studies in Kenya, at the moment, rhesus macaque monkeys are being used to study the system and progression of the virus (simian immunodeficiency virus) that affects the immune system of macaque monkey with the hope of extrapolating the knowledge of the virus progression to the study of

progression of Human Immunodeficiency Virus (HIV), the virus that causes AIDS but so far the problem of causal disanalogy exists for if there were no causal disanalogies between humans and animal biochemical conditions then animals infected with HIV could develop AIDS.

Even heart drugs were actually discovered from their effects in people, not experimental animals. The blood pressure lowering effect of propranolol was discovered when it was given to patients with angina. None of the previous animal tests had suggested that it would have this important action. Methyldopa, another heart drug, was effective in test-tube studies, but in animal tests it failed to lower blood pressure. One doctor ignored these results and tested methyldopa on patients with high blood pressure. It worked. Nitroglycerine is used to treat angina, but the nitrate drugs were discovered solely from observations of patients with angina, and owed nothing at all to animal experiments¹⁶.

The discovery that cigarette smoking is the main cause of lung cancer, it is reported, was one of the most important in the history of cancer research. The link was proved not through animal experiments, but by studies of smoking and non-smoking populations and by more than twenty-seven investigations into the smoking habits of lung cancer patients. On the other hand, the results of decades of animal research have been inconsistent and ambiguous. Most animal experiments failed to show that cigarette caused cancer at all, and where tumors did develop they were not the same as those found in human patients.¹⁷

Finally let us consider models of ischemic stroke. It is the case that for more than a century, scientists have attempted to use animals to model ischemic strokes in humans. By using animal models, scientists thought they could understand the causes of stroke, and help to develop potential therapies. On the contrary the project has not succeeded and as Wiebers et al point out:

A large proportion of patients with ischemic stroke have underlying multifocal atherosclerosis which have developed over many years or decades. Such individuals may have numerous associated risk factors, which predispose it to this disease process... Some attempts have been made to model atherosclerosis in some animal species and to account for hypertension and increasing age, but it is clear that these circumstances do not reproduce the human situation. In fact, most models of ischemic stroke are derived from young animals with no underlying chronic disease or any genetic predisposition to such diseases¹⁸.

Wiebers et al further makes it clear that the failure of animal models stems from systematic disanalogy. "Many variations, both within and between species, have been recognized, not only in the vascular anatomy, but also in histopathologic responses to identical ischemic insults and treatment responses to cerebral ischemia"¹⁹.

Moreover, not only are there systematic disanalogies in animal models of stroke but there are as well intervention disanalogies, conditions induced in animals entirely by the researchers' intervention. Wiebers et al explain:

With some ligation techniques, craniotomy introduces several variables unlike the human disease situation. These include skull trauma, external blood vessel injury, and changes in intracranial pressure. While most of the embolic techniques avoid the invasive features of craniotomy, they provide less control over the location and extent of the resulting cerebral infarction. Foreign body techniques also fail to mimic in any observable features of human emboli, including the tendency for human clots to undergo lysis, migrate into distal portions of the arterial system, or recanalize over time²⁰.

In summary, empirical evidence from stroke research suggests that there is further reason to think that the condition that for animals to be used as models for human biomedical situation requires that there should be no causal disanalogy between the model and what is being modeled will not be satisfied.

But one may still hold the view that applied biomedical research using animals led to the discovery of drugs or therapies for respiratory diseases that were major causes of death in the last century. On the contrary there is evidence to prove that this is not the case.

A researcher, R. C. Lewontin, notes that in the last century many people died of tuberculosis, of diphtheria, of bronchitis, of pneumonia and particularly among children died of measles and the perennial killer, small pox. As the nineteenth century progressed, the death rate from all these diseases decreased continuously. Small pox was dealt with by medical advance, but one that could hardly be claimed by modern scientific medicine, since small pox vaccine was discovered in the eighteenth century ... by the time clinical therapy was introduced for tuberculosis in the earlier part of last century, more than ninety percent of the decrease in the death rate of that disease had already occurred²¹.

In short only a relatively small increase in lifespan occurred after the big increase in biomedical research and it is debatable if even this small increase in lifespan is due to applied biomedical research using animals.

Although Heins Ruesch, as quoted by Michael Fox, notes that “there does not exist one single important therapeutic discovery due to vivisection [i.e., animal experimentation]”²², we can conclude with the International Agency for Research on Cancer that the problem lies in extrapolation due to causal disanalogies. Their conclusion is that: “At present, no objective criteria exists to interpret data from studies in experimental animals ... directly in terms of human risk”²³ and one can add that not only in terms of human risk but also in terms of human well being. Now, after having explored the scientific issues involved in applied biomedical research using animals in connection to humans’ biomedical condition, we now proceed to investigate into whether basic animal research is of relevance to human biomedical phenomena.

4.3.0. THE RELEVANCE OF BASIC ANIMAL RESEARCH TO HUMAN BIOMEDICAL PHENOMENA

As has already been mentioned, in basic animal research, the findings in laboratory animals are not directly applicable to humans. Basic research’s main objective is to expand one’s knowledge of biological organisms which eventually may be indirectly applicable to humans, usually in unexpected ways. The main objective of basic research therefore is to satisfy human curiosity and any spin-off of it which happens to be relevant for human biomedical condition is basically accidental. Therefore as Fox put it: “The question of whether the desire simply to understand something or to comprehend how something functions is enough to justify a person’s engaging in a certain kind of inquiry, or even to receive money for so doing, can be raised ...”²⁴.

This brings to the fore how far the idea of pursuit of knowledge for its own sake is tenable. Fox being a biochemist and also being aware that the issue at stake, that is the question being raised, is concerning the utility of basic animal research, maintains that throughout the entire range of human disciplines, the fundamental reason for engaging in a certain kind of inquiry is simply to satisfy the desire to understand things or to comprehend how something functions. In Fox's view, then, one can as well ask, for example, the value of doing philosophy or studying history, the classics, and literature. How worthwhile is it to inquire into the origin of the universe or of our own species? Of what use is it to know why bees dance? Perhaps these questions have no other answer than that human beings perennially ask why? of anything and everything²⁵.

The question, therefore is, is it the case that animal basic biomedical research is of no relevance to humans as such, save for the satisfaction of the researcher's curiosity? Julius H. Comroe, a medical educator and researcher maintains with Fox that even though basic research is curiosity-oriented, time and again researchers have stumbled upon important discoveries, crucial in their benefits to humanity as it later turns out, without themselves realizing it then or perhaps even during their life times²⁶. Basic research, therefore, may have remote and subtle applications and a kind of practical significance that was not initially apparent. Comroe who holds that most clinical advances in cardiovascular pulmonary medicine and surgery were based on basic research cites Stephen Hales' work in which the latter established the first direct measurement of arterial blood pressure; Comroe wrote:

In 1733, an English clergy man, Stephen Hales used a 9-foot-long glass tube attached by brass connection to a flexible wind pipe of a goose and

measured blood pressure in the femoral and carotid arteries of horses. Why did he do it? ... In brief, Hales was curious about nature.²⁷

Comroe also cites an instance of missed opportunities and delayed application of basic research in the history of anesthesia. He wrote:

Laughing gas parties were common in the early 1800s and Humphrey Davy, who repeatedly inhaled nitrous oxide in his experiments of 1799, even suggested its use in general anesthetic agent but no one deliberately gave it to prevent pain until 1844...Michael Faraday suggested in 1818 that ether be used to prevent surgical pain, and ether jags were a common form of social entertainment in the 1830s and 1840s; but no one gave it deliberately to prevent surgical pain until 1842.²⁸

One of the most fascinating examples in Comroe's retrospective is that of John Tyndall, a nineteenth-century British physicist, who became preoccupied with the apparently useless question of what makes the sky blue. In a brief account of his research Comroe shows how Tyndall's experiments designed to answer this question (which he did) also provided "(1) the final blow to the theory of [the] spontaneous generation [of germs], (2) proof of the defense mechanisms of the airways against inhaled particles, (3) quantitative tests of air pollution and of clearance of particles from inspired air, and (4) the first observations of the antibacterial action of penicillin"²⁹

The crux of the matter, therefore, is that basic research is not really goalless at all,³⁰ unless one choose to designate knowledge and understanding as only valuable when they have immediately foreseeable practical benefits.

As Coile and Miller have put it:

Case studies of the sort written up by Comroe reveal that science can progress only if considerable encouragement and support is given to basic or "curiosity-oriented" research. Only in this way will there be fund of ideas and information for subsequent researchers to draw on.

Without such a pool of contributions, the dramatic breakthroughs would become impossible and science itself would atrophy.¹¹

In brief, any benefits associated with animal basic research are indirectly from their having promoted insights and hypotheses that may ultimately lead to new understanding of, or treatment for, human disease. But since animal basic research, save for these breakthroughs, is primarily concerned with knowledge for knowledge's sake it will be proper to draw the line where absolutely undisciplined curiosity or unfocused inquiry is responsible for sufferings of sentient beings.

4.4.0 CONCLUSION

In this chapter it has been pointed out that the apparent analogies between animals (models) and the human conditions being modeled is the bone of contention for scientists engaged in applied biomedical research. On the contrary the condition that for applied animal biomedical research to be relevant to human phenomena there should be no causal disanalogy between the model and what is being modeled has never been met. This one brings to question the use of animals as models in applied biomedical research. The problem of disanalogy can thus be solved if humans are used for experimentation but again this one appears to be morally troublesome.

On the other hand, in basic animal research, the question of causal disanalogies does not arise because findings in laboratory animals are not meant to be directly applicable to humans. The main objective of basic research is to expand one's knowledge of animals, knowledge which may eventually be applicable to humans in unexpected ways. In fact,

the truth, of the matter is that use of animals in basic research has led to some advancement in medical discoveries.

That basic research may be useful to humans in unexpected ways notwithstanding, the idea that animals have some moral worth, which puts a question mark on their use in such researches, has not been looked into. The practice of animal experimentation both in applied and basic research requires a moral appraisal or evaluation and this is what the next chapter is going to deal with under the title: "The Ethical Dilemma of Animal Experimentation."

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CHAPTER FIVE

THE ETHICAL DILEMMA OF ANIMAL EXPERIMENTATION

INTRODUCTION

In the problem statement we saw where, basically, the dilemma of animal experimentation originates from. As Singer puts it, "speciesist bias like racist bias, is unjustifiable, an experiment cannot be justifiable unless the experiment is so important that the use of brain-damaged human, would also be justifiable"¹. The idea of whether animal experimentation is normally warranted is further exacerbated by the problem of extrapolating findings from animal experimentation to human biomedical phenomena.

The object of this chapter is to give a moral appraisal of the dilemma of animal experimentation. We start by considering the question of whether severely retarded humans should be experimented on bearing in mind that according to Singer, an investigator is a speciesist if he cannot experiment on a brain-damaged human who is at an equal or lower level of awareness of the animal that the investigator experiments on. Stephen Post's and Bonnie Steinbock's arguments in favor of speciesism vis-à-vis Singer's position shall be examined. Then we shall give a critique on the stand taken by Singer. Finally another dilemma, which ensues even if the 'marginal cases' issue is resolved, shall be put forward.

5.1.0 SHOULD SEVERELY RETARDED HUMANS BE EXPERIMENTED ON?

A CRITIQUE OF SINGER'S POSITION

Just to make the dilemma that singer raises more clearly, Steinbock has paraphrased the issue which Singer raises this way:

I doubt that anyone will be able to come up with concrete and morally relevant difference that would justify, say using a chimpanzee in an experiment rather for a human being with a less capacity for reasoning, moral responsibility, etc. Should we then experiment on the severely retarded?²

Singer further puts it this way. If the experimenter claims the experiment is important enough to justify inflicting suffering on animals, then such an experiment should be equally important to justify inflicting suffering on humans at the same mental level. This is because, to him, the difference between the two is just that one is a member of our species and the other is not. But appeal to that difference is to reveal a bias no more defensible than racism or any other form of arbitrary discrimination.³ And Singer calls this bias spesiesism.

After taking the preceding stand, Singer has not proceeded to tell us when, then, an experiment is justifiable. So when confronted with a question like, are we prepared to let thousands of humans die if they could be saved by a single experiment on a single animal, he replies by asking whether experimenters would be prepared to carry out their experiments on a human being with irreversible brain damage, so severe as to rule out mental development beyond the level of a four-month old infant.⁴

Singer, therefore, has raised a problem to which he has not given a solution. Given Singer's position one is left wondering whether in order not to be speciesists,

investigators should experiment on severely retarded humans. Before giving a critique on Singer's position and taking a stand, we evaluate Post's and Steinbock's attempt to resolve the dilemma raised by singer.

Post argues that "Species loyalty is the outgrowth of millennia of human evolution shaped by natural selection. This 'Kin selection' or 'kin altruism' is deeply ingrained in the human biogram."⁵ In short, speciesism is morally justifiable because favoring one's Kin is biologically natural.

When Post claims that favoritism toward Kin is "natural" he must mean something weaker: namely that biological creatures have a tendency to favor their own species. Finally he must believe that morality and law must encourage this biological tendency. But this one leaves one wondering why such a tendency is morally permissible. There are other biological tendencies we think morality should constrain. For instance, we probably have a tendency to prefer those who look like us those who have the same tint of skin as ours. However we do not encourage or morally sanctify these tendencies.

Morality should tame these impulses. Therefore, if some 'natural' tendencies are morally permitted while others are prohibited, then the bare tendency cannot be what is moral (or immoral). In short there is no convincing reason to prove that speciesism is natural; but even if it were natural, we see no reason to believe morality should promote or even permit it.

Akin to Stephen's view is Steinbock's which is that "certain capacities, which seem to be unique to human beings, entitle their possessors to a privileged position in the moral community".⁶ Steinbock further argues that human life is of more value than animal's and so human experimentation is unjustified on this ground. And this is because of certain capacities and abilities that normal human beings have which animals apparently do not and which human beings cannot exercise if they are devastated by pain or disease.⁷ Therefore, according to Steinbock, differences between human beings and non human animals, intelligence being chief among them, provide a rational basis for different moral treatment and consideration.

Steinbock has raised a point, which is worth taking issue with: that normal humans have certain capacities and abilities, which they can only exercise if they are not devastated by pain. Therefore since animals cannot reason, there is nothing wrong if they are experimented on if this can alleviate humans' pain and suffering. Does this reasoning make sense?

The above reasoning does not make sense because even a being which is less rational has some interests which can be only satisfied if that being is alive. What Steinbock is suggesting is that we should accept hierarchical society based on degree of intelligence. Worse still is the fact that such a hierarchical society will give way to experimentation on severely retarded humans just in the same way as it will give way to animal experimentation. Therefore the argument that disease and suffering will interfere with humans' enjoyment of their higher faculties is not warranted; such an argument as we

have seen is vulnerable. Nevertheless, it would be expedient to consider the argument she offers against experimenting on the retarded humans.

According to Steinbock normal human beings feel a closer identification with the severely retarded human beings. Humans would be horrified by the use of retarded humans in medical research. It is terribly difficult to know how to evaluate such feelings.⁸

Steinbock further asserts that:

I am willing to admit that my horror at the thought of experiments being performed on severely mentally incapacitated human beings in cases in which I would find it justifiable and preferable to perform the same experiments on non human animals capable of similar suffering may not be a moral emotion. But it is certainly not wrong of us to extend special care to members of our own species; motivated by feelings of sympathy, protectiveness etc.⁹

Steinbock's argument leaves a lot to be desired. A person who is motivated in acts by sympathy can be said to be a virtuous person. But there is no guarantee that acts inspired by sympathy are always good acts. If one is a sympathetic racist, for example, one will be inclined to act sympathetically toward members of her own race, favoring their interests above others. Her sympathy would be real and, so far as it goes good. But a sympathetic act in this case may not be beyond moral reproach – may, in fact, be positively wrong because it is rooted in unfairness. So sympathy notwithstanding, its status as a virtue to be encouraged simply will not cancel the weight of a theory of right action.

So far (to our knowledge) only Post and Steinbock have presented strong arguments against experimenting on retarded humans and in support of animal experimentation. However their arguments, as we have seen, does not prove that it is not speciesist to

experiment on an animal which is more intelligent and aware than some severely retarded humans. For this reason the dilemma highlighted by Singer remains at large.

We now proceed to give an argument which is against experimenting on the severely retarded humans yet does not claim to justify animal experimentation. We start by pointing out the apparent contradiction in Singers argument. According to Singer, Sentience does not simply provide us with reasons for acting; it is the only relevant consideration for equal consideration of interests.¹⁰ But with the same breath Singer maintains that "surely pain felt by a mouse just is not as bad as pain felt by a human. Humans have much greater awareness of what is happening to them, and this makes their suffering worse"¹¹

This latter statement of Singer makes more sense than former. This example will support the latter statement. Take the case of a person dying slowly from cancer and a laboratory mouse undergoing the same fate. A person dying slowly of cancer will suffer more because with higher level of awareness, he will know that he is terminally ill and so he will feel frustrated, for example, with regard to his future plans and by the dread of death, among others. On the other hand, since a mouse cannot see itself as an entity with a future, it cannot have preference about its future existence. Hence the mouse will suffer less. Consequently equal consideration of interests cannot be based solely on bare sentience; other factors like level of awareness and rationality come to play. In fact when discussing the issue of the value of life Singer makes this summary "rational being's life has some distinctive value over and above the life of a merely sentient creature".¹² And

so Singer concludes that "when we come to animals who, as far as we can tell, are not rational and self-conscious beings the case against killing is weaker contrary to the case against killing non human animals which are rational and self-conscious beings aware of themselves as distinct entities with a past and a future".¹³ Singer therefore wonders why investigators experiment on these intelligent non-human animals and not on infants, newborns and those with irreparable mental damage. He neither says that we should nor does he say we should not experiment on these marginal humans. What follows is an attempt to show why marginal humans should not be experimented on - note that this argument does not suggest that non-human animals ought to be experimented on.

To start with, note that even-though normal infants and newborns are not rational and self-conscious, potentially they are. For this reason it would be wrong to experiment on them because normally, at some point in their lives they will be rational and self-conscious humans. But how about experimenting on a human being with irreversible brain damage, so severe as to rule out any mental development beyond the level of a four-month old infant?

As we have seen, Singer relates the degree of suffering of a being to that being's cognitive ability and not only to bare sentience. So whereas mere sentience is a factor to consider, rationality and self-consciousness are other factors which determine the degree of suffering of a being. Since humans have a higher level rationality as Singer admits, this will makes humans suffer more. It is for this reason that mentally defective humans

should not be experimented on and what follows is a further justification of the above assertion.

Eventhough the mentally defective desires and plans for the future will not be frustrated since they do not have any, killing such mentally defective humans will have significant effect on other normal human beings. Horror at the thought of experiments being performed on those with irreversible mental damage will make humans to suffer severely. Human beings will also be terrified of what will happen to them in case they become vegetables'. So human beings ability to conceive themselves as distinct entities with a future and their higher level of awareness which makes them horrified at the thought of experiments on retarded humans will make experimenting on such marginal humans morally troublesome.

The preceding reasoning is not speciesist because we are not suggesting that non-human animals should be experimented on instead. We are simply giving a reason, which is perfectly in line with the principle of equal consideration of interests. Since the suffering of the humans as a result of the horror at the thought of experimenting on humans with irreversible mental damage will be apparent and real there is no way we can compare it with happiness of those humans who will benefit from experimenting on retarded humans because, for first, we do not even know whether such experiments will lead to a breakthrough. Therefore the question of animal experimentation was put forward incorrectly by Singer. It should not be a question of either experimenting on animals or on retarded humans or on both but due to the reasons given above animal

experimentation should be de-linked from the idea of experimenting on severely retarded humans.

5.2.0 THE CONSEQUENT COUNTER DILEMMA

So far we have seen that animals being sentient beings have interest not to suffer pain and so far there is no convincing reason for ignoring the animals' interest not to suffer. We have also seen that some animals are closer to humans in terms of rationality, in the manner in which these animals relate to each other, biological similarities, and some animals like chimpanzees are even able to learn sign language. In brief these animals are phylogenetically closer to humans. But also bearing in mind, as we saw in chapter four, that casual disanalogies across species makes extrapolation of findings from animal experimentation to human biomedical phenomena a problem since animal models are not isomorphic to human systems they are supposed to model, if an experiment is to be done at all then animals which are phylogenetically close to humans are the ones to be used. For this reason the best test subjects for results to be extrapolated to human biomedical phenomena are non- human primates or those animals that are phylogenetically close to humans. This is not to eliminate the problem of extrapolation but to reduce it in a sense.

The question then: how can the investigator identify enough relevant casual similarities to scientifically justify experimentation without finding sufficient functional similarities to undercut their moral acceptability? In brief, if the underlying biological mechanisms are sufficiently similar to justify reasonably direct scientific inference from animals to humans then the higher- order traits of the test subjects are likely similar to human traits

to make research morally troublesome. Investigators are thus caught in a logical trap. In order to defend the usefulness of research they must emphasize the similarities between animals and humans but in order to defend it ethically, they must emphasize the differences. The problem is that they cannot have it both ways.

5.3.0 CONCLUSION

The value of life of a being depends on many factors like the level of awareness of that being, its ability to conceive what is happening to it, its ability to distinguish between suffering and enjoyment and not simply on bare sentience. All sentient beings have some rights but these rights must accrue to their status.

When it comes to the practice of animal experimentation, those animals which are good test subjects if the results of these experiments are to be relevant for human biomedical phenomena are to be biologically and cognitively similar to humans such that justifying the differences between them and humans to justify experimenting on the former becomes ethically unjustifiable. On the other hand, since experimenting on retarded humans to benefit normal humans will create a lot suffering to humans, it is not speciesist to eliminate such suffering by not using such retarded human for biomedical research. This is perfectly in agreement with the principle of reducing suffering in the world and does not suggest that non-human animals should be experimented on instead.

Notes

- ¹ Peter Singer, "All animals are equal" in Biomedical Ethics, fourth edition . Thomas A . Mappes and David Degrazia eds.(New York: Magraw – Hill Inc, 1996), 241.
- ² Bonnie Steinbock, "Speciesism and the Idea of Equality" in Morality and Moral controversies fifth ed., John Arthur, ed. (New Jersey, upper saddle river: prentice hall, In 1999), 146.
- ³ Peter Singer, 'All Animals are Equal', op cit , pg. 241.
- ⁴ Ibid., 240 Note that in page 241 of the same book, Singer explains why he does not want to take a stand with regard to animal experimentation. If asked when then an experiment is justifiable he says that "it will not do to say 'never!' putting morality in such black and white terms is not appealing because it eliminates the need to think about particular cases; and in extreme circumstances, such absolutist answers always break down."
- ⁵ Stephen Post, "The emergence of species Impartiality: A medical critique of Biocentrism" in perspective in Biology and medicine, 1994, 36 pg. 295.
- ⁶ Steinbock, op. cit., 145.
- ⁷ Ibid., 145.
- ⁸ Ibid., 146.
- ⁹ Ibid., 147.
- ¹⁰ Peter singer, Practical ethics(Cambridge: Cambridge University press, 1979), 50 and 58.
- ¹¹ Peter Singer, Practical ethics (Cambridge: Cambridge university press, 1993), p.58.
- ¹² Singer, Practical Ethics . 1979, op. cit., 82.
- ¹³ Ibid., 93.

CHAPTER SIX

CONCLUSION AND RECOMMENDATION

The idea that if a being suffers then there is no moral justification for refusing to take that suffering into consideration is ethically defensible. Consequently the idea of animals liberation is not vacuous. But when talking of liberating animals, on behalf of which animals are we talking? This question arises because there are thousands of animal species. We have insects, bacteria, reptiles, primates and so many other classifications in animal kingdom that to talk of liberating all animals becomes a problem.

St. Thomas Aquinas among the others maintained that the difference between animals and humans is that of kind. According to Aquinas' tradition, therefore, the idea of equality for animals is vacuous . Animals and humans, according to this tradition, are different because humans have subsistent souls while animals do not. Aquinas put it this way:

It must be necessarily allowed that the principle of intellectual operation which we call the soul, is a principle both incorporeal and subsistent. For it is clear that by the means of the intellect man can have knowledge of all corporeal things. Whatever knows certain thing can not have any of the things in its nature; because that which is in it naturally would impede the knowledge of anything else.¹

On the other hand the sensitive soul of animals has no per se operations of its own, and that every operation of the sensitive soul belongs to the composite. Wherefore we conclude that as the souls of brute animals have no per se operation they are not subsistent.²

Whether or not Aquinas' argument that humans have immortal souls and animals do not is satisfactory is an issue which we shall not delve into because it is not of relevance to this study. Even if humans have immortal souls which continue to exist after their corporeal bodies have ceased to be, this does not make humans' pain more painful than animals'. Consequently, there is no convincing reason for dragging in the idea of immortality of human soul into this argument at all.

According to Singer, every sentient being has interest to be taken into account especially if their interest clashes with humans'. But is it the case that every sentient being has interests to be considered? Singer has not clearly answered this question; to answer this question in the affirmative one needs to maintain that all sentient beings can suffer. Singer himself believes that the grounds for believing that other mammals suffer are closely analogous to the grounds we have for believing that other humans suffer. It remains to consider how far down the evolutionary scale this analogy holds. Obviously it becomes poorer when we get further away from man. To be more precise would require a detailed examination of all that we know about other forms of life.³

What we learn from the preceding is that we can only know if an animal is suffering by analogy that is by comparing the similarities between animals and humans. It is therefore on these similarities that the strength of animal rights are to be based. It is also on the basis of these similarities that we have to say that animals have non-negligible moral worth even if less worth than humans.

Since animals have non-negligible moral worth, even if research on them could be in some way valuable to humans, the search for alternatives is no irrational pipe dream. Moreover as we saw in chapter four, The International Agency for Research on Cancer puts it clear after many years of research that "at present, no objective criteria exists to interpret data from studies in experimental animals directly in terms of human risk".⁴

This leaves human experimentation as the alternative in applied research. Careful work with volunteers as approved by local ethical committees can offer valuable insights into the diagnosis and treatment of health problems. Clinical research of this kind will eliminate the problem of extrapolation and will save animals from undergoing unnecessary suffering. What we think therefore is that humans should be given incentives in order to volunteer for biomedical research. In addition to using volunteers, population research should be encouraged.

Population research is that research which focuses on looking for preventive measures. People's life-styles, for instance, can make them susceptible to serious diseases. One obvious example is that cigarette smoking can cause lung cancer. For many years this was disputed because laboratory animals forced to inhale cigarette smoke did not develop lung tumors. Another example is the study of arteriosclerosis and high blood pressure. Many researchers have forced animals such as monkeys and apes to eat high fat diet in effort to see if this causes arteriosclerosis (hardening of the arteries). But again it was population studies which showed that arteriosclerosis and high blood pressure were more

common in countries or communities where diets contained a lot of saturated fat, than among those whose diets were less fatty. While population research is time consuming and difficult to conduct, it yields results of direct application to human health-unlike animal experiments. These findings show that animal experiments can mislead investigators, the unnecessary pain inflicted on animals notwithstanding.

When it comes to basic animal research, replacement techniques like tissue culture and computer simulation should be used. Tissue culture is a general name for keeping cells, tissues and organ slices alive outside the body for long periods of time, during which the cells may grow and multiply. Recent advances mean that tissue from almost any part of the human body can grow in culture, and the structure and function of the brain, liver heart, kidney, skin, eye, pancreas and stomach studied at the level of the cell. Emphasis should be laid on their usage rather than promoting or insisting on animal experimentation.

Computers can also be used instead of testing many thousands of natural synthetic substances on animals to see if they have medicinal effects. Computer simulations should be used to 'model' various body systems such as respiration or circulation for use in teaching science students. Using these programs, standard 'experiments' such as drug injections or nerve stimulation can be mimicked with computers, producing realistic traces of effects on factors such as heartbeat and breathing rate without using a single laboratory animal. At the moment science students at universities and colleges do vivisection instead of using these alternative methods, for routine researchers. Such

routine experiments should be discouraged and students encouraged to read the already published experimental procedures and results instead of repeating the same experiments year in year out.

None of what we have said shows that animal experimentation has been worthless. None of this shows that abandoning animal experimentation may not hinder some biomedical advances. What it shows is that animal experimentation is influenced by speciesism and the remedy does not lie in whether severely retarded humans should be experimented on but in looking for ways of taking animals' interests into account.

Last but not least, we have seen that sentience is a defensible boundary for moral considerability but other factors like rationality, a beings level of awareness, among others, are also relevant for moral considerability. We should therefore increase our understanding of the nature of non-human animals especially their mental, emotional and social lives. We should also think more carefully about how to make moral judgements especially when weighing interests of creatures of different life values. In our view this may be the crucial moral issue for assessing the legitimacy of the practice of animal experimentation.

Finally, this dissertation is not a definitive statement of issues. It is hoped that this dissertation has advanced the debate. If researchers will take the issues raised here seriously then they can help explain the limitations of and the precise value of animal experimentation. If critics of animal experimentation will likewise take these issues

seriously they too, may come to see ways in which animal experimentation may be scientifically legitimate. For those currently pushing for the introduction of legislation to protect animals like the Kenya Society for Protection and Care of Animals (KSPCA), this dissertation, it is hoped, will offer conceptual foundation of such legislation.

Notes

¹ Thomas Aquinas, Summa Theologica, Literally Translated by Fathers of the English Dominican Province. Vol1 (New York: Banziger Brothers, Inc 1920) Part 1, Question 75 Article1.

² Ibid, Part1, Question 75, Article3.

³ Peter Singer, "Animal liberation" in People, Penguins and Plastic Trees: Basic Issues in Environmental Ethics. Christine Pierce and Donald Van Deveer, eds., (London: Wadsworth publishing company, 1995), 54.

⁴ International Agency for Research on Cancer (IARC) The Miscellaneous pesticides. (Lyons: IARC Press 1983) 13.

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