THE ETHICS OF ANIMAL EXPERIMENTATION:
THE LITTLEWOOD REPORT

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B.A., The University of British Columbia, 1985

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

in
THE FACULTY OF GRADUATE STUDIES
(Department of Political Science)

We accept this thesis as conforming
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THE UNIVERSITY OF BRITISH COLUMBIA
August 1993
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Date Aug. 31, 1993

DE-6 (2/88)
ABSTRACT

The Littlewood Committee’s defence of a laissez-faire approach to animal experimentation is ethically indefensible on grounds that non-human animals are sentient, autonomous beings who express an acute interest in their continued existence and demonstrate an aversion to the frustration of their interests; as such, non-human animals can be considered moral subjects.

The defenders of the rationalist tradition discount the moral significance of welfare interests and therefore cannot satisfactorily explain our moral obligations to either non-rational humanity nor to the non-human animal, who both lack a contra-causal free will. Though the moral significance of our prerreflective capacities establishes that there can be no equality of interests between the human and the non-human animal, an animal’s will to live nevertheless precludes the compromise of its vital interests in other than exceptional cases in which the interests of the beneficiaries of animal research are mortally threatened and no alternatives to the animal model exist.

A modified account of the interest theory of rights which emphasizes both the elements of will and interest not only satisfactorily explains our legal obligation to nonrational
humanity, but also underlines the plausibility of extending the fundamental right to life and the right not to be harmed to non-experimentation which embodies both deontological and utilitarian principles is required and offers the best means for an objective evaluation of an experimental protocol, the ethical propriety of which is often obstructed by a strong presumptive case in favour of the researcher and by certain incoherent ideological commitments of the scientific and medical research establishment which claim that science is ‘value-free’ and that knowledge is an absolute value.
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I would like to particularly express my sincere gratitude to Professor Sam LaSelva for his invaluable guidance and patience as my thesis supervisor. I would also like to thank Professor Phil Resnick for his willingness to be my second reader, and to also acknowledge both him and Professor Paul Tennant for their understanding as graduate advisors. I am also grateful to those members of the Department of Political Science who offered me their advice and encouragement during the course of this programme.
The moral relationship between the human and the non-human animal has been discussed for hundreds of years, yet there has been no consensus on the moral status of non-human animals. This centuries-old debate began to acquire a sense of urgency in the mid-nineteenth century with the ascendancy of the laboratory sciences, the rise of which involved a predominance of procedures without anaesthesia and consequently this provoked sharp moral criticism from antivivisectionists and animal welfare societies.¹

The laboratory sciences were to remain predominant areas of vivisection until shortly prior to World War II at which time they began to be overshadowed by biomedical and behavioural research which became the set of mushrooming activities that have formed the pillars of the present modern research establishment. At first biomedical and behavioural research was encouraged with great enthusiasm and remained unregulated until the mid-1960s. However, at about that time public anxiety was aroused by research on human subjects and eventually by the use and abuse of animals in experiments. It was during this period that considerable public anxiety prompted a British government

¹ See Littlewood Report, Chapter 2.
investigation of animal experimentation known as the Report of the Departmental Committee on Experiments on Animal,² popularly referred to as the Littlewood Report.

The subject of my thesis is the Littlewood Report which will be reviewed in Chapter 1 and used as a basis for an extended discussion of the ethical problems surrounding animal experimentation. The Report forms an orthodox defence of vivisection which will be challenged in this essay. It will be argued that the field of animal experimentation has to be fundamentally restructured. In this respect, regulatory legislation has to reflect that animals are moral subjects and not chattel. Traditionally, in an experimental setting, animals have been perceived as delicate and expensive pieces of equipment which are to be used efficiently and cared for properly, but are otherwise deserving of no further moral consideration. (Diamond, 1981: 336-46) This objectification of the animal research subject is central to the orthodox view of vivisection which upholds the freedom of the investigator almost completely above the protection of the vital interests of the experimental animal.

²It is significant to note that the Littlewood Report closely coincided with the commission of the Report of the Technical Committee to Enquire into the Welfare of Animals Kept Under Intensive Livestock Husbandry Systems, otherwise known as the Brambell Report, which was also prompted by considerable public concern, in this case over the use of factory farming methods.
Defenders of this approach assert that the field of animal experimentation raises no moral problems if some minimal standard of humane care is adhered to; in their view researchers should not be fettered by constraints on the use of animal research subjects. Government regulation is regarded as unnecessary and cumbersome because it creates bureaucratic delays and supposedly hampers the development of research; whereas alternatively such mechanisms as peer review etc., are considered sufficient to ensure that animal research subjects are handled to meet some minimal standard of humane treatment. This was essentially the Littlewood Committee’s perspective on vivisection.

In contrast, reformers and abolitionists maintain that animals can form sources of moral claims which originate in an animal’s capacity for sentience and its ability to lead a life of independent existence. It will be argued that these realities of the animal condition require us to treat animals as direct objects of moral concern, that is, as moral subjects. The non-human animal demonstrates a will to live and an aversion to the frustration of its interests. Therefore it is conceivable to maintain that non-human animals can be subjects of a right to life and a right not to be harmed, though these rights are unequal to the parallel rights of humans.
These assertions will be respectively discussed in Chapter 2 and 3. The objectification of the non-human animal will be discussed in the former chapter, which will be largely devoted to an analysis of some salient traditional objections against an improved moral status for animals, particularly those views which maintain that the moral significance of man’s prereflective capacities justifies the treatment of animals as merely indirect objects of moral consideration. Chapter 3 will be devoted to a discussion of the applicability of the concept of interests to non-human animals as a basis for the inclusion of the non-human animal into the category of rights-holders.

Moreover, if we are to consider animals as moral subjects, we have a moral obligation to reduce and replace the use of animals in experimental research and to refine experimental technique in order to minimize the ethical costs of animal experimentation. An important part of such an effort involves making a cost-benefit analysis of an experimental protocol and this would mean weighing the pain and suffering of the animal research subject against the possible benefit of the experiment under question. In fact, the cost-benefit ratio has become the cornerstone of the British Animals (Scientific Procedures) Act which replaced the Cruelty to Animals Act (1875) in 1990. Section 5(4) of the Act defines a cost-benefit ratio as follows:
In determining whether and on what terms to grant a project licence, the Secretary of State shall weigh the likely adverse effects on the animals concerned against the benefit likely to accrue as a result of the programme to be specified in the licence.³

This essay is a defence of a similar intermediate ethical position on the experimental use of animals which strikes a compromise between the morally significant interests of both animal research subjects and the interests of the beneficiaries of the research in question. It is characterized by a constrained utilitarianism which includes the pain, pleasure, and other morally relevant experiences of both the human and non-human animal. This ethic is rigorous enough to prevent the conduct of animal experimentation which may involve extremely high costs to the animal research subject and promises only small incremental gains in aggregate welfare, or gains which are large, but dispensable.

The implications of such an ethic are significant considering that most of the experimentation that is routinely performed upon animals does not meet the criteria of crucial, necessary, or life-threatening research. (Ryder, 1975: 22, 148, 248; Singer, 1990: 24-94) The present paradigm of animal research readily permits experimentation which involves high costs to the

research subject and potential human benefits which are questionable and distant.

It will be argued that a more substantive ethical imperative is in order according to which an experimental protocol is judged acceptable if its potential benefits greatly outweigh the costs to the animal research subjects, even after the anticipated benefits have been discounted for their uncertainty. (Sumner, 1988: 173) This directive can be used to ascertain an acceptable utilitarian cost-benefit ratio for the approval of an experimental protocol and in effect would be "equivalent to assigning the animal subjects a defeasible right not to be harmed which raises a threshold, though not an insurmountable threshold, against straightforward cost-benefit calculation." (Sumner, 1988: 173)

Thus, it will be proposed that the ethics of animal experimentation need to be informed by both utilitarian and deontological principles. In Chapter 4, it will be suggested that there is no strong incompatibility between utilitarian and rights-based directives as both can be expressed in terms of interests. Such an integrated approach considers the moral relevance of the aggregate good, but also ensures that the vital interests of animal research subjects are not compromised to satisfy the non-vital interests of the aggregate. The need for
such an integrated approach is further necessitated in view of an existent incoherent ideology of science and structural obstacles which obstruct an objective evaluation of research protocols, and hence prevent a fair consideration of the vital interests of experimental animals.
On 30 November 1962, the Home Secretary in Great Britain responded to considerable public anxiety over the issue of vivisection by announcing that a Departmental Committee of Inquiry would be erected to "consider the present control over experiments on living animals, and to consider whether, and if so what, changes are desirable in the law or its administration."

On 23 May 1963, the Committee for the review of animal experimentation was appointed under the chairmanship of the late Sir Sidney Littlewood and presented its findings to Parliament in April 1965. However, the Report was left to gather dust until six years later at which time its proposals were finally debated in Parliament. The Littlewood Report is a lengthy and meticulous document containing fifteen "General Findings" and eighty-three recommendations for revision of the Cruelty to Animals Act (1876) and its administration. The Report is divided into eight sections covering the background to the enquiry, present legal provisions and the administration thereof, pain in animals, the review of evidence, wastage of animals, the scope and

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1 Littlewood, ii.
organization of control, the supply of laboratory animals and a outlined in Appendix A.

Antivivisectionist societies had long-awaited such an investigation; nevertheless, the Report was a complete disappointment to antivivisectionists for several reasons. Inevitably, all commissions which are mandated to investigate a social or moral issue will reflect a limited perspective. It is often a temptation on the part of governments to choose committee members who would confirm rather than challenge governmental policies. (Vyvyan, 1971: Dewar, 1969) The two previous British Royal Commissions of 1875 and 1906 on animal experimentation anticipated this partiality and sought a remedy by publishing the entire verbatim evidence upon which they based their recommendations and conclusions which allowed concerned members of the public to form an independent judgement of their own. As a result, "their Reports and Minutes of Evidence were not only fine presentation of the state of affairs at the time, but they have ever since remained historical documents of great value." (Vyvyan, 1971: 178)

In contrast, the Littlewood Committee saw no need to make such information public, which is otherwise very difficult to obtain. It is indeed curious that the Committee would choose not to make a full public statement of the facts when it was preceded by two notable publications whose authors had set an excellent example
of openness. The Littlewood Report contains no verbatim evidence; that which is presented is paraphrased, and its sources are not noted. (Vyvyan, 1971: 178) Thus the Littlewood Report does not allow readers to judge the issues for themselves, which consequently, makes one unnecessarily skeptical of the collective judgement of the Commission.

In general, the Littlewood Report was permissive and condoned forms of experimentation in which animals would be made to suffer gratuitously such as in various forms of toxicology testing that for example include tests for the manufacturing of cosmetics in addition to biomedical research on self-inflicted forms of human suffering such as, smoking, drinking, drug-addiction etc. In the words of its authors:

    We think that it is in any case undesirable as a general principle to arbitrarily determine that particular kinds of purposes should never be served by animal experiments whether or not they involve stress or pain. (89)

The analysis presented in the Littlewood Report is flawed because its authors failed to make any satisfactory distinction between medical and non-medical research, and secondly because the Committee did not discuss the possibility of reducing animal experiments by questioning their necessity. In fact, the members of the Committee were not critical of an anticipated increase in animal experimentation and stated:
Our general conclusions are that, in spite of strong incentives to the avoidance, where possible, of animal experimentation, (a) the demand for using animals in research is likely to continue to increase in the foreseeable future...

However, the authors of Littlewood were reluctant to condemn even the least essential animal experimentation such as, cosmetic testing and the bulk of toxicology testing which are entirely commercially motivated and are thus almost impossible to justify on any serious moral grounds. The Committee's reluctance to pass judgement upon such dispensable forms of animal experimentation suggests that a progressive approach, which embodied both a heightened ethical concern for animal subjects and a sense of political realism was not taken despite the Committee's recognition that pain was a central concern.

The basic recommendation of the Littlewood Report was to implement a more stringent licensing system to regulate animal experimentation. The authors of Littlewood realized that the existing system was 'archaic, inconvenient and wholly unrealistic.' (Vyvyan, 1975) Importantly, the Report suggested that new legislation reflect a more intelligent and sophisticated working definition of pain to include any conditions which would affect the well-being of the animal, rather than a simple consideration of its physical pain, as was

defined in the 1876 **Cruelty to Animals Act**. In this respect, the Committee mentions that the concept of 'pain' yields three states of suffering:

1. discomfort (such as may be characterised by such negative signs as poor condition, torpor, diminished appetite);
2. stress (i.e. a condition of tension or anxiety predictable or readily explicable from environmental causes whether distinct from or including physical causes);
3. pain (recognisable by more positive signs such as struggling, screaming or squealing, convulsions, severe palpitation).

Thus the authors of Littlewood did not discuss the pain in animals euphemistically but used these types of evidence to state: "We are satisfied, therefore, that animals suffer pain in the same way as human beings." (Quoted in Ryder, 1975: 145, emphasis added) Despite this concession, it was obvious from the Committee’s provisions that it had hesitated to draw upon the full moral implications of this conclusion.

On a more fundamental level, the authors of Littlewood evade grappling with the ethical paradox underlying animal experimentation: Either the animal is a suitable model because of its close fidelity to the human animal, in which case its

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3In the author’s words, "We recommend, therefore, that the Act should be amended so as clearly to apply to any experimental procedure liable to cause pain, stress, or interference with, or departure from, an animal’s normal condition of well-being. (57-58)
compatibility raises embarrassing, and often ignored questions in respect to its ethical acceptability; or the animal is a bad model, in which case we must question why it should be used at all. (Rowan, 1984).

Although the Committee found the administration of the Act unsatisfactory in the recent past, it nevertheless thought that the basic assumptions of the Act were theoretically sound. On this point the Committee notes, "It has been apparent to us, however, that there are a number of respects in which administrative practice has fallen short of what has been made desirable by the rapid growth of experiment in recent years...There has been general concern that there have been too few inspectors to supervise steadily growing numbers of licensees and laboratories." (Littlewood, 80-81)

One of the Committee’s most fundamental proposals was that the Act should not be used for evaluatory or directional purposes. As the authors note in Paragraph 237:

So far as the Act itself is concerned, we have already indicated that in our view the law makes no provision for control to be exercised in accordance with some grand strategy of research or by selection of priorities or by evaluation of promise. We do not think there is any basis on which a comprehensive system of ‘directional’ or ‘value’ controls could be superimposed upon the field of animal experimentation in isolation from the general field. That is not to say, however, that what is done under the Act should ignore public opinion or ethical considerations.
Similarly, under the Cruelty to Animals Act, experimentation was permitted if it led "to the advancement by new discovery of knowledge which will be useful for saving or prolonging human life or alleviating human suffering" without excluding experimentation for the purpose of gaining abstract knowledge nor that which is directed towards saving or alleviating the suffering of animals themselves. (Littlewood, 1965: 5-6)

The cornerstone of the Cruelty to Animals Act was simply the prevention of unnecessary suffering. And likewise the authors of Littlewood felt that animal experimentation raised no further moral issues if certain minimal standards of humane care were met. In their words, "the Act should be based on the concept of preventing 'unnecessary suffering' and that effect should be given to the proposals of the Universities Federation for Animal Welfare which were that:

(1) each licensee shall take effective precautions to prevent or reduce to a minimum, any pain or other distress or discomfort in the animals used;

(2) every animal which is suffering discomfort which is likely to endure shall be painlessly killed as soon as the experiment has been completed;

(3) in no case shall any animal be subjected to severe pain which endures or is likely to endure. (Littlewood, 100)

The principle of the minimization of unnecessary suffering has
found universal expression in laws on animal welfare and in anti-cruelty statutes. Traditionally non-human animals have only received this degree of defence against maltreatment, and even so this slight legal protection is anthropocentric because non-human animals are considered chattel under present law and as such are a matter of legal concern only because of their judged utility for humans. (Dresser, 1984: 831)

Thus, the Littlewood Committee was faced with this lengthy legal tradition which denied, and continues to exclude, non-human animals from our moral community as moral subjects in their own right. Nevertheless, the authors of Littlewood were content to continue within the shadow of the cruelty-kindness tradition which has muted, rather than relieved animals from exploitation. The defenders of this tradition have virtually nothing to say about the numbers of animals that can be justifiably used for a certain purpose, nor do they think it necessary to proffer any precise reflections of intention before an investigator can justifiably interfere with the well-being of an animal.

Thus, in discussing their general restrictions, the authors of

"Tom Regan uses this term to refer to those who maintain that a sufficient account of our ethical treatment of animals simply involves no more than duties to refrain from being cruel to animals and to simply demonstrate kindness towards them. See, Tom Regan, The Case for Animal Rights, Berkeley: University of California Press, 1983, 195-200"
Littlewood stated that "the general question at issue, however, is whether the Act should be used as a means of altering the present course of research. For the reasons given in paragraph 237 we do not believe this a proper use of the Act." (Littlewood, 101) The Committee begins Paragraph 237 by outlining three fundamental questions that were posed to them by several critics of the existing level of animal experimentation, and these were as follows:

1. Who can say whether, if certain biological tests were forbidden, satisfactory chemical or other methods of testing would not be developed?

2. Who is responsible for establishing whether modern medical techniques, with their emphasis on immunology and drug therapy, both of which are inseparable from animal experimentation, are developing medical practice in the right direction?

3. Who is to take responsibility for moral or ethical judgment in the use of animals for experimental purposes as such? (Littlewood, 79)

Of course, these questions are extremely difficult as they challenge the moral, scientific and medical roots of vivisection and were understandably beyond the Committee's immediate terms of reference. However the Committee refused to deal with even modest evaluatory issues and proposed that these could be handled more efficaciously by an advisory committee the purpose of which was "to advise on proposed experiments of a novel or controversial character." (Littlewood, 197) The advisory
committee was to consist of:

...a legally qualified chairman and twelve members, each appointed in a personal capacity including biological scientists, veterinarians, scientific teachers and lay persons. (Littlewood, 197)

The decision to leave the ethical judgement of certain controversial forms of animal experimentation to an advisory committee leaves much to individual whim and little in the form of law. The proposal to include lay persons was a modest attempt at public accountability, but as will be discussed in Chapter Four, the dynamics of advisory and ethical review committees renders such an inclusion ineffective.

Furthermore, the Littlewood Committee failed to suggest any basic legislative reforms to the Cruelty to Animals Act, save for the proposal to redefine the Act’s concept of pain. This approach had the effect of turning the Littlewood Report into a technical and administrative analysis of animal experimentation at the expense of treating vivisection as a pressing social and moral issue. Indeed it becomes quite clear that "many of the criticisms of the Act still apply to the Littlewood Report itself." (Ryder, 1975: 148)

Furthermore, the Littlewood Committee proposed that self-regulation in terms of peer pressure and review, together with the cumulative effect of scarcity of funds and public opinion
would indeed serve as adequate controls on the conduct of animal experimentation, in lieu of substantive legislative reform to the Cruelty to Animals Act. The Act lacked any evaluatory and directional powers as it was narrowly framed upon the concept of unnecessary suffering, which really only forms the lowest common denominator in so far as the ethical treatment of non-human animals is concerned.

The Committee’s orthodoxy in this respect was also exemplified by its unwillingness to bring statutory pressure to bear on the use of alternative experimental methods. The Littlewood Committee had a rather bleak view on the matter based on its questioning of scientific witnesses:

The replies have been unanimous in assuring us that such methods are actively sought and when found are readily adopted; and that the discovery that will satisfactorily replace a test on the living animal is always a welcome event. It is welcome not only for humanitarian reasons but because the in vitro test offers advantages in economy, speed and precision. Discoveries of adequate substitutes for animal tests have, however, so far been uncommon, and we have not been encouraged to believe that they are likely to be more frequent in the future.(26)

It is interesting to note that no actual scientific testimony in this respect was included in the Littlewood Report so we are left with an unsubstantiated, pessimistic conclusion on one of the most critical issues surrounding animal experimentation. The Littlewood Report thus presents a laissez-faire approach to animal experimentation which does not require an investigator to
provide a strong justification for the pain, suffering and death of animal research subjects. Ideally, what was needed, according to critics, "was a sweeping reform introducing meticulously defined legislation that produced real protection for the animals used by scientists [and other researchers] while, at the same time, simplifying the situation from the point of view of the experimenter." (Ryder, 1975: 149) In short, the net effect of the Littlewood investigation was to reassure the public, and to refrain from interfering with vivisection. (Vyvyan, 1971: 179)

However, permissive defences of animal experimentation are falling into disfavour and initiatives for more external controls do not encounter as much resistance and hostility from either governments or research establishments. More recent legislation such as the British Animals (Scientific Procedures) Act⁵ reflects a heightened ethical concern for animal subjects and a shift away from the dogma of the humane tradition which has underpinned so much animal welfare legislation. Thus, the restricted utilitarianism of this new legislation Act has perhaps laid the foundation for both the reduction and the responsible use of animals in vivisection instead of a possible

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increase and abuse of animals in Britain’s laboratories.
My intent in this chapter is to rebut some salient, traditional objections against an improved moral status for animals. Recall that the Littlewood Committee condoned a laissez-faire approach to animal experimentation which continues largely unabated partly because animals have a negligible legal standing. In general, the "treatment of laboratory animals is a function of the moral standing we assign to species other than our own." (Dresser, 1985: 1148) I will argue that animals are not property, but direct objects of moral concern, or moral subjects. If animals do become subjects under the law such "legal personhood would mean that anti-cruelty laws would cease to appear to be more like laws of manners than the protection of individuals and it would no longer be possible to equate cruelty with 'victimless crimes' as Lord Patrick Devlin does in his book on the enforcement of morality."¹

Animals can be legitimately perceived as moral subjects because they are sentient, autonomous beings who express a desire to live and an aversion to the frustration of their experiential welfare. This perception of animals is at once reasonable and

demonstrable in contrast to the traditional, negative perceptions of animals as beasts and automata which have obstructed the intelligibility of improving the moral status of animals.

In addition to challenging these derogatory stereotypes, I wish to rebut the dominant belief that rationality is an essential condition for something to be considered as a direct object of moral concern. Philosophers as diverse as Aristotle, Aquinas, Descartes and Kant have maintained that man's deliberative capacities form the source of his moral preeminence and the justification for the near exclusion of the non-human animal from the moral domain. It will be claimed that rationality cannot be a qualifying condition for moral consideration because it has the unacceptable consequence of leaving unexplained our perceived obligations to nonrational humanity. Nor can the capacity of autonomy form an exclusionary condition because contrary to the claims of those who defend scholastized accounts of autonomy, a being can be considered autonomous if it has the ability to act and satisfy its preferences. (Regan, 1983: 84-86) Moreover, it will also be suggested that instincts underline an animal's autonomy.
I. Traditional Perceptions of Animals

The philosophical discussions of the moral status of the non-human animal have been greatly influenced by the humanist tradition of Aristotle and Thomas Aquinas. Aristotle declared in *The Politics* that:

> It is evident then that we may conclude of those things that are, that plants are created for the sake of animals, and animals for the sake of men...²

Not only has Aristotle defended man's supposed dominion, but he has also suggested that a food chain should be a model for human moral conduct. I recall this passage from *The Politics* because I am always keenly aware of the heckler who toots, "If animals eat other animals, why can't we?". And while I am not concerned with the ethics of our diet in this paper, my general point here is to suggest that a food chain is not a moral continuum. The dark side of the "Great Chain of Being" (Rollin, 1981: 8) bespeaks of an inequality between female and male, of an abandonment of the weak, and reflects an interplay of strength, endurance and power.

However, despite its apparent ruthlessness this whole natural drama bears an element of innocence because animals lack the particular ability to reason which would enable them both to pursue ideals and to transcend their environment. Their actions are thus shaped by the dictates of necessity, but our situation is markedly different. We are a part of this Great Chain of Being, but we also stand outside of it because we have a sense of morality. Karl Marx expressed this brilliantly (and without reference to the unenlightened notion of "beastliness"), when he wrote of man as a "species-being". Man is a species-being because he "adopts the species (his own as well as those of other things) as his object...," and he later continues to say that:

The animal is immediately one with its life activity. It does not distinguish itself from it. It is its life activity. Man makes his life activity itself the object of his will and of his consciousness. He has conscious life activity. It is not a determination with which he directly merges. Conscious life activity distinguishes man immediately from animal life activity. It is just because of this that he is a species-being, or it is only because he is a species-being that he is a conscious being, i.e. that his own life is an object for him. [emphasis added] (Quoted in Clarke & Linzey, 1990: 42-43)

And so, because we are not one with our life activity we are able to reflect upon our actions, to think twice, so that we do not abandon or eat our young or strive toward inequality in our gender relations, but instead we do just the very opposite of
many animals in these and many other respects. Indeed, "Whenever man deliberately makes nature his principle, he regresses to primitive urges...[and] such expedients lead from historically reasonable to utterly barbaric forms of social domination." (Horkheimer, 1946: 104-6, 126-7)

Humans thus occupy a very special place because we are at the apex of the evolutionary pyramid and so share a continuity with the Great Chain of Being, but not a complete identity with it because we have a sense of morality; therefore, we cannot model our entire moral conduct on the behaviour of non-human animals. Nor can we exclude non-human animals from serious moral consideration. As moral beings we are compelled to draw the non-human animals firmly within the bounds of morality. Our moral aptitude does not endow us with licence, but with added responsibilities -- and therein lies the snag. Presently, however, animals are hardly party to our systems of moral beliefs, and this is "an omission so pervasive as to have become essentially invisible." (Rollin, 1981: 4)

No doubt, the excellences of man have been celebrated against a caricature of the rest of the sentient world. It "is the folk-figure that has been popular with philosophers. They have usually taken over the popular notion of lawless cruelty which
underlies such terms as 'brutal,' 'bestial,' 'beastly,' 'animal desires,' and so on, and have used it, uncriticized, as a contrast to illuminate the nature of man." (Midgley, 1978: 27) However, for those who will bother to study them, animals are the absolute opposite of what such pejorative terms as "brute" and "beast" suggest. Wolves, in particular, have been completely vilified in this way, when in fact, they are models of excellent conduct. Ethologists have observed that wolves are monogamous and demonstrate tremendous loyalty to their pack and bravery and diligence when faced with difficulties. They greatly respect each other's territories, clean their dens and rarely kill anything that they are not going to eat. If they fight, the conflict ends with an act of submission; this inhibition towards killing also extends to females and cubs. Like most social animals, wolves are known to have a well-developed etiquette that includes ceremonies of greetings and rekindling through which social ties are nurtured. (Midgley, 1978: 26)

Moreover, "our knowledge of this behavior is not based upon the romantic impressions of casual travelers; it rests on long and careful investigations by trained zoologists, backed up by miles of film, graphs, maps, population surveys, droppings analysis, and all the rest of the contemporary toolbag." (Midgley, 1978: 26) Many animals do act from inner motives and therefore, we can speak of wolves as being loyal, courageous, etc., because these
clearly are not obscure and unimaginable feelings, but confirmable ones. The terms I have used to describe the behaviour of wolves are to be understood literally, and not metaphorically, unlike what certain behaviourists would have us believe such as, B.F. Skinner, who sometimes wrote of organisms "'emitting behavior as if it were some kind of gas." (Midgley, 1978: 52)

Nevertheless, there are those who will contend that these are only rough parallels between human motives and morals and animal behaviour-patterns because animals are 'merely physical'. (Clarke, 1982: 5) But this "hypothesis appeals too readily to human pride, to a strange willingness to think ourselves quite other than the beasts." (Clarke, 1982: 5) However, committed behaviourists would be hard pressed to explain the cases in which dolphins, for example, have helped drowning sailors, and guided ships through treacherous waters when they have not been trained and conditioned to perform these deeds. (Sapontzis, 1987: 34) Thus, do these dutiful actions not suggest that some animals are capable of at least virtuous actions? And so, these striking examples should give us reason to pause.

Thus, I remain puzzled as to why political philosophers have not given animals their due moral consideration. Though, for
example, Aristotle acknowledges man as an animal, his classic definition of "man as a political animal" underlines "the peculiarity of man in comparison with the rest of the animal world, that he alone, possesses a perception of good and evil, of the just and the unjust, and of other similar qualities; and it is association in these things which makes a family and a polis." This becomes an excluding condition from which Aristotle infers that "he that is incapable of society or so complete in himself as not to want it, makes no part of a city, as a beast or a god" and thus, that these two categories of beings -- beasts and gods -- cannot be party to political association.

The above is a succinct statement of Aristotle’s cherished beliefs, which together with Platonic thought helped lay the foundation of a robust intellectual status quo that still prevails and greatly influences philosophical judgements on the moral status of animals. Thomas Aquinas, for example, was to be profoundly influenced by Aristotelian thought and subsequently, a lengthy Aristotelian--Thomist tradition has formed the paradigm within which relations between the human and non-human world have been discussed; but it is now somewhat in a state of flux as it meets the challenge of environmental ethicists and

Examples of the Aristotelian--Thomist paradigm reflect an undue emphasis on the moral significance of rationality and a traditional disdain for the straightforward nature of animals behaviour. For example, in *Summa Theologica*, Aquinas wrote that "intellectual creatures are ruled by God as though He cared for them for their own sake, while other creatures are ruled as being directed to rational creatures." (Quoted in Clarke & Linzey, 1990: 8) He defined "the very condition of the rational creature, as having dominion over its actions..." in other words, a creature must be *free* to perform an action in order for it to be called immoral or moral. So for example, "a coin machine that gives the correct change is not responsible for this since it could not choose to do otherwise," thus its disposal of change is in the nature of a "determined action" and therefore, cannot be judged as immoral or moral.

We may in this respect conceive of instincts as being in the realm of determined actions, but this cannot mean that animals are coin machines. However, the non-human animal as *automata* has been a favourite stereotype, along with that of the animal as

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beast, alien, child, and demon. (Benson, 1983: 79-90) Some great minds did much to perpetuate the perception of animals as machines. For example, the great philosopher, Rene Descartes and his followers insisted that animals lack consciousness because they lack linguistic ability. Descartes' influence was enormous in this respect; his writings and the science of his time taught that various 'humours' and 'animal spirits' caused different behavioural responses in animals, and these ideals were to form the theoretical basis for some of the most deplorable vivisection.⁵

Descartes and the Cartesians maintained that animal behaviour could be entirely explained in mechanistic terms which thus made a belief in animal consciousness a "prejudice to which we are accustomed from our earliest years." (Quoted in Regan, 1983: 3) But linguistic ability has to presuppose consciousness, otherwise how would children learn how to speak? And furthermore, if something can move of its own volition, does that not readily suggest that it must possess consciousness? Surely, this is not a unique human quality, so therefore, would

⁵A great deal of this was publicly conducted by Francois Magendie, a professor of medicine at the College de France, where on one occasion, a bystander was to witness and recall a brutal experiment involving a dog in which, "Twice did the dog, all bloody and mutilated, escape from the implacable knife and twice did I see him put his forepaws around Magendie's neck and lick his face." (British Medical Journal, 22 August 1863, 215).
not a mechanistic explanation of human behaviour also lead to a denial of human consciousness? Would not humans, to use Decartes own words, be 'thoughtless brutes'? Animals do indeed behave in a way that is consistent with the presupposition that they do possess a mental life. We may not be able to see mental states in either human or animal, but that does not mean consciousness is a myth. The basis for consciousness in non-human animals which have complex nervous systems is proven by the fact that the essential features of our nervous systems were already well developed and in place when predecessors of our own species began to diverge from those of other modern species. (Singer, 1975: 224-25) In short, the claim that such animals are conscious is no longer a controversial one and to take issue with it will surely guarantee a banal discussion on any occasion.

However, the traditional paradigm, which is characterized by its concern for the moral significance of rationality, and its contempt for the straightforward nature of animal behaviour, nevertheless remains an entrenched part of our moral and philosophical tradition. Traditional wisdom has it that our ability to rationalize places us in a higher category of moral existence. While the traditional paradigm does not deny that animals are conscious, it remains deeply flawed because it
equates thought with rationality and consequently, rationality begins to acquire the guise of a seamless concept.

It has been established that many, many animals can think. Empirical evidence to this effect abounds. Take for example the famous experiments with Lucy the Chimpanzee who mastered American Sign Language used by the deaf. Though there exists a great deal of controversy surrounding these experiments in terms of whether such animals have a sense of language, that is, if they are capable of initiating dialogue etc., they are nevertheless added proof that animals can at least think, and that the great majority of animals can also learn not only the behaviour of their own species, but that some can even learn part of the behaviour of a more evolved being. We certainly do not have to venture to the laboratory to prove this simple point, and at the expense of belabouring it, I would ask the reader how is it possible to train dogs for police work, or for shepherding, or sadly enough for human amusement if they were not capable of thought?
II. Animals, Morals and Rationality

A. Rationality

Rationality continues to be the most serious and important criterion that demarcates the bounds of our moral community. It is straightforward to see why rationality has to be an essential feature of moral agency; a moral agent is a being who can be held responsible for his actions, and so his actions can be evaluated as good or bad. In addition, a moral agent can have duties and responsibilities, and he or she possesses the ability to engage in moral reflection and make decisions accordingly. (Taylor, 1986: 14) But not all humans are moral agents, for example, children, the insane, and the mentally challenged, etc., cannot be morally or legally responsible for their actions when they violate ordinary moral norms.

Though these individuals lack rationality, they are squarely within the bounds of our moral community as direct objects of moral concern, despite the fact that they are not moral agents; however, they are undeniably moral subjects and therefore, it is not clear why one has to be a moral agent in order to be a direct object of moral concern. The presence or absence of rationality creates a hierarchy within our own species, but his reality has not led us to exclude nonrational humanity from the moral domain.
and therefore, neither can it form a relevant criterion to exclude the non-human animal from the moral arena.

There is instead a great need to underline the moral significance of sentience because the relief or avoidance of pain is the most basic of universal desires amongst all sentient beings. It is an established scientific fact that all species most nearly related to our own, such as mammals and birds, share the same basic nervous system as we do and that despite the fact that we have a more developed cerebral cortex, this part of our brain is associated with thinking functions and not with feelings or emotions which are located in the diencephalon; this evolved far before the cerebral cortex and its well-formed in many species of non-human animals, in particular mammals and birds. Thus, there is no real reason to deny that a non-human animal, especially a mammal or a bird, which does not have a radically different nervous system from our own, is any less able to experience pain than are we and its lack of rationality cannot justify its gross differential treatment.

One’s ability to rationalize has only relevance to relations in which there is an element of rights and duties arising through transactions, which H.L.A. Hart has described as ‘special rights’. (Godlovitch, 1971: 160) Therefore, it does not follow that a being has to be a moral agent in order to be worthy of
serious moral concern. Yet there are those, such as Jan Narveson who insist that only moral agents can be direct objects of moral concern. Narveson defends his position as "rational egoism". (Narveson, 1977: 166-78) On Narveson's view "every rational being attempts to maximize its utilities, whatever they may be, that is, to satisfy its desires, interests, etc." Rational egoists are thus motivated to enter into agreements with one another involving "a set of restrictions on [their] behavior" in order to maximize their utilities.

The rational egoist is thus completely motivated by self-interest and according to Narveson, rights are also grounded in self-interest, "To talk of rights...is to talk of the basis of claims which we have self-interested reason to make and do make, to varying degrees." Needless to say, whenever self-interest is advanced as the source of morality some counterintuitive and undesirable consequences emerge for those who are unable to enter into agreements, or to make and defend their self-interested claims.

Not surprisingly, animals do not qualify to have rights given Narveson's requirements. As Narveson says, "This perspective puts animals out of reach of morality without at all denying that they are capable of suffering, etc. Instead, it provides the basis for a frank, and of course heartless, rejection of the
relevance of their sufferings." (Narveson, 1976: 178) And while this may not disquiet many, rational egoism has odious consequences for human moral patients such as the mentally retarded, who like animals are unable to make self-interested claims, and like them, cannot be protected by strict morality, but only by the "sentimental" interests of moral agents. In Narveson's words, "...we shall want the feeble-minded generally respected because we ourselves might become so, as well as out of respect for their rational relatives who have sentimental interest in these cases." (Narveson, 1977: 177)

To objectify morality solely on principles of rational egoism conflicts with our ordinary sense of justice. The unattractive feature of rational philosophies is that they proceed "as if the world contained only dead matter (things) on the one hand and fully rational, educated, adult human beings on the other -- as if there were no other life-forms." (Midgley, 1978: 18) Obviously, the interests of both nonrational humanity and animals are not satisfactorily respected by a Narvesonian conception of morality.

B. Social Contractarianism and Kantianism: Constriction of the Moral Circle

Social contractarianism is based on the same assumption as Narveson's conception of morality and of rationalist
philosophies as a whole. Social contractarians maintain that our morality is a kind of voluntary agreement between rational, autonomous, self-interested (hence egoistic) individuals who can both benefit from making an agreement and who are able to enter into such an agreement and keep it. The contract is basically an agreement between individuals to leave a 'state of nature,' a pre-societal condition in which everyone acts on unconstrained self-interest that no longer obtains after they agree to enter into society which places constraints on individual behaviour so that each person stands to gain by entering into it.

The requirements of contractualist theories do not allow animals to be members of a moral community. Rawls' A Theory of Justice makes this abundantly clear as he writes:

...we should recall here the limits of a theory of justice. Not only are many aspects of morality left aside, but no account is given of right conduct in regard to animals and the rest of nature...Certainly it is wrong to be cruel to animals and the destruction of a whole species can be a great evil. The capacity for feelings of pleasure and pain and for the forms of life of which animals are capable clearly impose duties of compassion and humanity in their case. I shall not attempt to explain these considered beliefs. They are outside the scope of the theory of justice, and it does not seem possible to extend the contract doctrine so as to include them in a natural way. (512)

Rawls does not propose that animals can be the beneficiaries of strict justice because according to his theory a capacity for a sense of justice is a necessary condition for being owed justice. More importantly, Rawls' rational egoists are choosing
principles under conditions of moderate scarcity which would only be intensified if they decide to start sharing social values with non-participants such as animals. (Robison, 1978: 210) Rawls thus has not provided grounds for stating that cruelty to animals is wrong in light of the moral character of the participants in his 'original position,' and given that they are self-interested egoists who as such have not motive to show animals "compassion and humanity"; nor is Rawls clear on the whole question of whether we have indirect or direct duties towards animals.

But surely we should not be content with the conclusion that because we have no sound theoretical basis for being concerned about how we use and abuse animals, that we can dismiss the matter. (Baier, 1983: 62) On the contrary, these should be good grounds to maintain that theories of this sort are inadequate because they signal a retreat into "dogmatic slumbers on the question of how animals ought to be treated." (VanDeVeer, 1983: 147) Furthermore, contractualist theories emphasize rationality and autonomy and consequently become implausible when we consider for example that even marginalized humans such as, the mentally challenged and the enfeebled would not be entitled to strict justice because they are not rational and autonomous and thus not capable of having a sense of justice which Rawls proclaims one has to possess in order to be owed it in return.
Are we then supposed to take only a sentimental interest in these people as Narveson also suggests? Surely this is an undesirable outcome for those who defend this view of morality.

One’s fundamental moral intuitions and critical thinking cannot be reduced to a barren moral landscape of rationality and autonomy. Our scope of moral concern is much wider and richer than this suggests; in fact, I would think a good deal of it has to do with the minimization and alleviation of suffering. Ultimately, it is on this basis that we have deep moral intuitions about the mentally handicapped, despite their lack of autonomy and ability to rationalize; and I have suggested that these can be only of direct moral relevance to the endowment of special rights and have absolutely no bearing, logically or otherwise on moral questions surrounding pain and suffering, either in respect to humans or animals.

But neither does the Kantian account of morality address our deep moral intuitions about the intrinsic evilness of pain. For Kant something has to be rational in order for it to be an object of moral concern; according to Kant, "The essence of rationality is the ability to universalize and transcend mere particulars." (Rollin, 1981: 2) This is expressed in Kant’s famous Categorical Imperative: "Act only according to a principle which you can will would be a universal law." For
example, on Kant’s view, rational activity is an end in itself and since only moral agents are capable of rational activity, they are ends in themselves and are not to be treated as means, unlike animals, who on Kant’s view can be only of relative value because they are not rational. He writes:

So far as animals are concerned we have no direct duties. Animals are not self-conscious and are therefore merely as a means to an end. That end is man...Our duties to animals are merely indirect duties to mankind...If he is not to stifle his human feelings, he must practice kindness towards animals, for he who is cruel to animals becomes hard also in his dealings with men...(whereas)...tender feelings towards dumb animals develop humane feelings towards mankind. (Quoted in Regan, 1983: 177-78)

The Kantian account, and most indirect duty views are rooted "on an impoverished understanding of what animals are". Consequently, they yield thin, minimalist proposals on the moral status of animals, which are so radically conservative in character that we inevitably have to fall back on evanescent notions of sentiment and pity as our basis for the ethical treatment of animals. Predictably theories of this sort place animals beyond the moral pale, despite most animals' developed capacity to experience pain and suffering.

Furthermore, to infer that to harm animals would make one more

\footnote{Tom Regan, The Case for Animal Rights, Berkeley: University of California Press, 1983, 193.}
likely to harm people is a non-theoretical deduction and a product of conjecture. If it were true, as Robert Nozick rightly comments, "Things then would be different if there were no possibility of such spillover -- for example, for the person who knows himself to be the last person on earth," in which case talk of harming animals would have no occasion to arise as we could in good conscience be sadistic towards them; and furthermore, as Nozick says, it is not clear why there should be such a "moral spillover". After all, "Do butchers commit more murders? (Than other persons who have knives around?)" (Quoted in Clarke & Linzey, 1990: 168) In conclusion, indirect duty views, be they those articulated by Narveson, Rawls or Kant propose animals as our moral playgrounds, rather than a rightful consideration of them as direct objects of moral concern, or as moral subjects.

III. The Moral Relevance of Sentience and Autonomy

A. Sentience

Bentham once forcefully underlined the moral relevance of sentience, when he 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...It may one day come to be recognized that the number of the legs, the villosity 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 well as a more conversable animal, than an infant of a day or a week or even a month old. But suppose they were otherwise, Can they talk but, Can they suffer? (Quoted in Clarke & Linzey, 1990: 139)

Hedonistic, or classical utilitarianism is well-known for its empathy towards all sentient creation. The capacity for suffering is held as a sufficient condition to render something a direct object of moral concern and as such the experiences of all beings are considered morally relevant. As utilitarians, both Singer and Sumner, for example, concur that sentience is a sound criterion for moral standing. Sumner states that,

[it] is in virtue of being sentient that creatures have interests which are compounded either out of their desires or out of the experiences they find agreeable. If morality has to do with the protection and promotion of interests, it is a plausible conjecture that we owe moral duties to all those beings capable of having interests. But this will include all sentient creatures.⁷

This is a dramatic contrast to the moral arbitrariness that characterizes Kantian, Rawlsian and Narvesonian accounts of morality which try to draw an ‘insuperable line,’ and fail in their attempts because they are so doctrinaire. Almost all non-human animals are sentient in more than just the primitive sense and it is thus difficult to deny how animal suffering and death

cannot be experienced as a serious moral issue.

In its most rudimentary form, sentience involves the ability to experience pleasure and pain and it correspondingly involves the ability to enjoy and suffer. We find that a sophisticated level of sentience "include(s) wants, aims, and desires (and thus the ability to be satisfied and frustrated); attitudes, tastes, and values; and moods, emotions, sentiments, and passions." (Sumner, 1981: 142) Sentience thus "admits of degrees" and for this reason it should be characterized as a complex rather than as an imprecise capacity. No doubt, an abundance of evidence suggests that all sentient life forms express aversive behaviour to noxious stimuli and so demonstrate an interest in the avoidance of suffering.

The avoidance of pain is thus the most basic universal desire, but animals also have an interest above and beyond just the mere avoidance of pain that they express a desire to fulfill the whole natural repertoire of behaviour which is appropriate to their own telos -- that "uniquely, evolutionary determined, environmentally shaped set of needs and interests which characterize the animal in question -- (what defines) the 'pigness' of the pig, the 'dogness' of the dog." (Rollin, 1989:

\[\text{Ibid.}\]
The capacity for suffering thus sharply separates something that has only instrumental value, such as rocks, trees and plants, from that which can be considered as a direct object of moral concern, such as human and non-human animals, who qualify to be treated as moral subjects, while vegetation and inanimate objects do not.\(^9\)

**B. Autonomy and Instincts: A New Perspective**

Let us recall that Kant insisted that a being is autonomous only if it can universalize what it ought to do as a valid moral imperative based upon what another individual similarly placed would likely choose to perform. Now because animals are not

\(^9\)It would be convenient here to consider a response to the popular argument that plants feel pain which deserves mention not because of its validity, but because it is a reflection of brute ignorance. The *Secret Life of Plants* by Bird and Tomkin, which claimed that plants scream and amongst other things could read people's minds has been completely discredited. (Singer, 1975; Rollin, 1981; Sapontzis, 1987) And even without these notorious reports, would not logic lead us to conclude that if plants did demonstrate the capacity to experience pain, it would certainly be at a lesser threshold than the pain felt by non-human animals, otherwise it would seem that plants would have developed the ability to move away from their source of pain as all humans and animals are able to do. (Singer, 1975) Furthermore, if plants did feel pain they would possess either a diencephalon and/or release enkephalin or endorphine hormones which are associated with a pain response and provide the body with an anaesthetic effect. (Rollin, 1981: 31, 41)
capable of such abstraction, they cannot be considered autonomous on the Kantian account, which I may add is not a very ordinary sense of autonomy. It is rather mysterious to suggest that an individual can be only considered autonomous if he can universalize from his desires, goals etc., about what a similarly placed individual would do, in order for a person to decide what he ought to do. However, autonomy is much more of a straightforward and streamlined concept, and not necessarily synonymous with the ability to make universally valid moral judgements, but something associated with the ability to have preferences and the capacity to fulfill them. As Tom Regan suggests,

"it is enough that one have the ability to initiate action because one has those desires or goals one has and believes, rightly or wrongly, that one's desires or purposes will be satisfied or achieved by acting in a certain way. Where the Kantian sense requires that one be able to think impartially if one is to possess autonomy, the preference sense does not." (Regan, 1983: 85)

The Kantian sense of autonomy does not shed light on actions that are neither good or bad, but are nevertheless intelligent and purposeful and that demonstrate the ability to act, which otherwise makes the ascription of autonomy to many animals, especially higher mammals who are self-conscious, quite conceivable. An animal's autonomy is both intelligible and confirmable because "they have preferences and have the ability to initiate action with a view to satisfying them." (Regan,
Animals are equipped for a life of autonomous existence, in fact, it "is a sobering thought that animals could do without man yet man would find it almost impossible to do without animals." (Harrison, 1971: 11) A wolf does not need the aid of a human to hunt, to dig a den, or to terminate a fight with its rival. Moreover, to claim that this is a complex repertoire of behaviour is entirely instinctual and mechanistic is a reflection of one's poor sense of observation, rather than a wolf's lack of conscious purpose and autonomy.

The Stoics were part of this tortuous tradition which has claimed that non-human animals act "as if they possessed reason, but were actually moved by Nature." (Clarke, 1982: 19) As I have mentioned, this reductionist interpretation of animal behaviour was supported by the Thomists, indeed it has become convenient dogma to hold that animal 'non agit, sed agitur,' that is, it does not act, but is acted on. (Clarke, 1982: 19) There is a common insistence that if an animal demonstrates any type of intelligent behaviour it is completely instinctual and not indicative of an animal's ability to judge and discern. But just a cursory glance at an ordinary dog or cat immediately reveals that animals pause and deliberate countless times during their daily existence, when for example they attempt to cross a busy
road, or when they accept or reject food which is offered to them, or when they take heed before they approach another dog or cat.

The hunt also disproves the convenient stereotype that all animals are completely instinctual and otherwise quite hopeless. A successful hunt requires much ingenuity, coordination and skill as no two scenarios of a predator and its prey are identical, contrary to what an otherwise reductionist interpretation of animal behaviour would probably have us believe. A holistic and more precise interpretation of animal behaviour suggests that many animals, especially mammalian forms, are beings which have "varying degrees of ability to recognize and respond intelligently to their environments." (Sapontzis, 1987: 33)

Certainly, a significant part of animal behaviour is instinctual and conditioned, but 'instinctual' patterns need not be unintelligent, as Clark suggests, "The opposition between instinct and intelligence is misplaced: intelligence is shown in a grasp of the features of a situation relevant to the animals' purposes, an ability to find satisfactory solutions to perceived problems, or to recognize a suggested solution as a good one. These abilities could not exist without a sturdy foundation of instinctual perceptions and techniques." (Clarke, 1982: 20,
Humans and animals share some of the most fundamental behavioural paradigms that are both a product of innate factors and conditioning. There is no other way of explaining certain patterns of behaviour in an economical and sensible way except to attribute these predispositions to instincts. If this may sound platitudinous to some, it has nevertheless offended the most extreme social and political reformers throughout history, who in their role as moral surgeons should have been squarely asked, "Why [then] do people form families? Why do they take care of their homes and quarrel over boundaries? Why do they own property? Why do they talk so much, and dance, and sing? Why do children play, and for that matter, adults too? Why is nobody living in the Republic of Plato?" (Midgley, 1978: 56)

Man is appropriately defined by both his culture and his instincts. The concept of instinct is much shunned by philosophers who have emphasized the uniqueness of human nature in terms of our possession of speech, rationality, and culture. However, most social scientists would claim that apart from a few simple physical needs, man's behaviour can be only comprehended in terms of his culture. (Midgley, 1978: 15) But our ordinary affections, for example, and indeed our special affections for our own children are clearly not learnt, but are
a natural, positive predisposition, despite Plato’s exhortations to the contrary. Fortunately, nobody has tried to put all of Plato’s proposals into practice; some of them are the ultimate denial of man’s natural, positive predispositions and reflect an attempt to remake him as a product of a brutal, authoritarian culture.

In drawing the above examples, I have tried to suggest that instincts also can be used to legitimately explain human motivation to a significant degree, and yet we do not have to make fatalistic assumptions, or resort to some sort of biological determinism in order to hold this position. It seems a holistic and more precise approach to studying any form of behaviour requires us not to dismiss innate factors in favour of environmental ones. As concepts, instincts have traditionally been used to more or less exclusively analyze animal behaviour and as such rationalist philosophers have been contemptuous of its application to human conduct in their strenuous attempts to defend man’s superiority and uniqueness.

But ethologists have made great efforts at refining instinct as a concept. (Midgley, 1978: 5) Instincts are complex and "range from such closed, reflexive mechanisms through Gestalt tendencies and motor coordinations to open, flexible, general dispositions and educated sensitivities," so that not all
instinctual actions represent the actions of homing salmon and Pavlov's salivating dogs. (Sapontzis, 1987: 32-33) In this regard it is helpful to distinguish between what ethologists term 'closed' and 'open' instincts. "Closed instincts are behaviour patterns fixed genetically in every detail, like the bees' honey dance, some birdsong, and the nest-building pattern of weaver birds." (Midgley, 1978: 52-53) Closed instincts entirely dominate the behaviour of simple animals, in which case instincts can be properly understood to replace intelligence. (Midgley, 1978: 53) The more complex and intelligent an animal becomes the more closed instincts are replaced by 'open' ones, which are defined as "programs with a gap," or general dispositions that allow experience to mature what is innately determined.

So for instance the general disposition to come home is prevalent many animals and is satisfied through myriad forms of travel, and possible routes, the choice of which partly depends on a host of environmental factors. It seems that the more sophisticated and intelligent the animal is, the more likely it is for an animal to use its ability to judge and deliberate in order for it to overcome any of the innumerable obstacles that it may encounter, otherwise such animal would have to bear the misfortune of an early death should it have been motivated by closed instincts alone.
And this does indeed happen to simpler animals, such as salmon, whose instinct to come home is closed in character and they, therefore, cannot reroute themselves should their usual runs be blocked. However, a cat is a significantly more intelligent animal and will be able to negotiate its way home in several ways; it is able to use its ability to judge and discern to overcome the different obstacles that it may encounter. Like that of the salmon’s, a cat’s instinct to come home prevents it from wandering at random, and endows this locomotive tendency with purpose, but the cat’s instinct to come home, unlike that of the salmon’s, is an open one, and as such leaves room for it to deliberate and draw from experience.

Conclusion

The traditional paradigm treats animals as indirect objects of moral concern, and as such, is completely unsatisfactory. It is rooted in strong anthropomorphic assumptions which constrict our moral community in an arbitrary manner and denigrate the rest of sentient creation these assumptions are simply based on convenience, woven around caricatures of animals as machines, beasts, and brutes. ‘Pretend-animals’ have been a favourite with
philosophers far too long; and furthermore, the negative stereotypes of animals have contributed much to the objectification of the non-human animal.

Animals are worthy of being considered as direct objects of moral concern. As sentient, autonomous beings, animals can, without absurdity be considered as moral subjects. Moreover, it has been suggested that instincts underline an animal’s autonomy, which I have claimed is to be rightly understood in the preference sense and not in the ability to rationalize; moreover, I have tried to suggest that instincts are not the antithesis of intelligence but in fact enable an animal to act and satisfy its needs and preferences.

In addition, I have criticized rationalist philosophies on several fronts, first to suggest that much of morality is not only concerned with the moral significance of formal rationality as Kant perceived, but with the minimization of suffering, as the utilitarian tradition rightly reminds us of, and on this basis animal suffering cannot be dismissed. Unfortunately, animal suffering has been discounted by the rationalist tradition which deems, rather counterintuitively, that the possession of moral agency is crucial for one to be a recipient of direct duties.
However, I have claimed that moral agency and rationality are not seamless concepts, but ones that are relevant only to the endowment of special rights, and as such have no bearing on the questions of whether a being can be considered a direct object of moral concern and as a beneficiary of basic moral rights.

In the following chapter, the applicability of the concept of interests to animals will be explored as both a means of analyzing the generic notion of animal welfare and as a basis of conferring certain basic moral rights upon animals.
The purpose of this chapter is to explore the validity of applying the concept of interests to animals as a basis for extending the rights-view to animal research subjects and as a means of raising the threshold against a laissez-faire approach to animal experimentation. It will be argued that as sentient, autonomous beings, animals do possess interests. As has been mentioned, the capacity for suffering and enjoyment is a prerequisite for having interests at all, a condition that must be satisfied before we can speak of interests in a meaningful way. (Singer, 1990: 7) An appreciation of the capacity of sentience shifts the focus of morality from an exclusionist perspective based only on the uniquely human characteristics of rationality, language, free will and moral agency to an inclusionist account of morality grounded on the protection of interests.

The net effect of such a shift is to underline the fact that rights should function as a means of protecting individual interests as opposed to only protecting the characteristics of current rights-holders. (Hanula, R.W. & Hill, P.W., 1977: 283) While the capacity of sentience is a prerequisite for having interests, other objective criteria are needed to give content
to the concept of interests if one is to claim that this should be the function of rights. Moreover, it will argued that the interest theory of rights presents a more satisfactory explanation of our legal duties and obligations and a sound basis for extending the fundamental right not to be harmed and the right to life to the non-human animal.

I. The Epistemology of Interests

Before one begins a quest to identify specific, relevant interests a brief epistemological note on interests is in order. When we choose to engage ourselves in an activity and exclude ourselves from the performance of other activities, we have demonstrated an interest in that activity. Interests thus indicate an urge, desire or an impulse, in other words, they are an expression of various aspects of conation. (Hanula, R.W. & Hill, P.W., 1977: 257-58) An overwhelming number of animals possess a conative life characterized by drive, and this is part of a larger subjective capacity through which they experience the dualities of "pleasure and pain, feeling well and feeling ill, elation and depression, feelings of fulfillment and frustration, and many other feelings that contribute to or detract from the enjoyment of or satisfaction with life." (Sapontzis, 1987: 117)
Non-sentient entities are devoid of a conative life and therefore, cannot legitimately be said to possess interests, though we can claim that such entities have needs as needs are not necessarily compounded out of any conscious drives. Plants, for example, have no psychological dimension to their existence and therefore can only experience life in a biological sense, whereas an animal has the capacity to experience life in a biographical sense. (Rachels, 1983: 275-84)

It is intelligible to attribute interests to animals given that many animals possess a subject and conative life textured by emotions, concepts, desires and beliefs which need to be expressed and fulfilled. Because animals possess a similar experiential welfare as both human moral patients and moral agents, they also can be harmed in comparable ways and thus, there is sound reason to claim that animals possess the necessary interest-bearing capacities that make it intelligible to refer to them as moral subjects who are entitled to a basic moral right not to be harmed, and the right to life.

The concept of interests allows one to effectively explore the generic notion of welfare. We can employ "language literally, not metaphorically, when we speak of the good, or welfare, of these animals." (Regan, 1983: 116) Human and animal awareness is sufficiently similar to claim that both species share many
qualitatively similar and even some identical interests which for analytical purposes can be divided into 'preference' and 'welfare' interests. Preference interests can be defined as A is interested in X, whereas welfare interests are to mean X is in A's interests. The former would include dispositions to want, like and desire; in addition, animals like humans have episodic interests which are not dispositional in nature, but which are dependent upon a present mental state. (Regan, 1983: 87-94)

Furthermore, as suggested in Chapter Two, the nature of animal consciousness demonstrates that animals possess a preference autonomy which is rooted in their ability to act towards the fulfillment of their preferences. It was readily conceded that animals (and many humans, specifically children and the mentally handicapped) do not possess a metaphysical capacity to exercise free will, in the Kantian sense. Nevertheless, "The notion of preference fills the gap between reaction to stimuli and contra-causal free will," and the fulfillment of preferences thus forms an important source of behaviour in both the human and animal.

Preferences form the most compelling evidence that directed

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conative action is an expression of interest rather than just a simple reaction to a present internal or external condition. More specifically, "expression of preference demonstrates an interest on the part of animals to have the options afforded by life." (Hanula, R.W. & Hill, P.W., 1977: 264) For example, a conative urge to look for food can be interpreted as a straightforward effort to assuage hunger, but the same conduct can also demonstrate a preference with respect to how such suffering will be alleviated and therefore this underlines an interest over and beyond the mere cessation of pain. To take a simple account, if a dog is given two bowls of different dog food, and it chooses to only eat from one, ordinary language usage permits us to say that the dog has preferred the one over the other. (Hanula, R.W., Hill, P.W., 1977: 258, 263)

Various ethological works, in particular Marian Dawkins' *Animal Suffering: The Science of Animal Welfare*, have reinforced the validity of the claim that animals do express preferences. Preference testing involves 'asking' an animal what it prefers by presenting it with a choice of food, bedding, housing etc., and observing what it chooses. Moreover, Dawkins noted that one can even measure a "degree of preference by 'sweetening the pot' or 'stacking the deck'. So for example, we can determine whether an animal prefers liberty over security, by giving it the choice of open housing or confinement. Dawkins suggests that one can
test this preference by giving the animal food *ad libitum* in confinement, but at random in the open and so observe whether or not it chooses the open area. (Rollin, 1989: 258) In addition, other ethological studies have shown that great numbers of species of animals demonstrate territorial interests without which distribution of many species cannot be effected. However, many would still insist that territoriality is nothing but a biological drive; but preferences can still be expressed in the manner in which such a drive is fulfilled.

II. R.G. Frey: Fido Cannot Have Desires, Beliefs, Nor Interests

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3Konrad Lorenz provides a good example of this in his seminal work, *On Aggression*, wherein he draws upon observations on the territorial behaviour of fish. It was noted when four fish of the same species were placed in a tank, in this case two pairs of cichlids, the strongest male claims the entire tank as its territory by chasing the other three fish 'mercilessly around'; these remaining specimens then had to claim whatever space they could. The weaker males took possession of a small space near the surface from where he resisted the attacks of the dominant male. This particular spot had strategic value as an area near the surface is vulnerable to aerial predators, and therefore the dominant male would attack less confidently in such a locus; thus, "the owner of such a dangerous area has, as an ally, the fear which the surface inspires in its bad neighbour." Konrad Lorenz, *On Aggression*, New York: Harcourt Brace Jovanovich, 1974, 36-37.
However, philosophers who subscribe to the exclusionist account, believe that animals cannot possess interests. In his *Interests and Rights: The Case Against Animals*, R.G. Frey provides the most extensive rebuttal to the claim that animals can have interests, and denies that interests can serve as an adequate basis for the conferral of moral rights.

Frey claims that if interests refer to needs, then plants, tractors, cave drawings, and other mere things can have moral rights if we are to use interests as a basis for such a conferral. Thus, the concept of interests is said to have no critical impact because we could say for example that, "tractors need oil"; and likewise, Frey insists that the concepts of "benefit" and "harm" similarly yield nothing as one also can say, "the Rembrandt painting would be harmed by exposure to the sun". And so according to Frey, these terms could just as well be applied to artifacts and other mere things, and therefore, interests cannot be the basis for the conferral of rights.

However, Frey's claims fly in the face of ordinary language use. The common use of "interests" is reserved only for beings who can be benefited or harmed if the needs of their plants,

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*The term exclusionist will be used to refer to humanists who emphasize the moral significance of rationality, language, free will and moral agency as a basis for denying that the non-human animal can be a subject of fundamental moral rights.*
The common use of "interests" is reserved only for beings who can be benefited or harmed if the needs of their plants, tractors and artifacts etc., are not met. (Sapontzis, 1987: 116-17) We do not therefore say that the tractor is interested in oil, or that the plant is interested in sunlight, but we rather say that the plant needs sunlight and the tractor needs oil.

Thus, analyzing interests in terms of needs is conceptually erroneous. As has already been argued, interests are compounded out of desires, urges and drives. In this respect, Frey concedes that interests are also a product of desires, but he claims that because animals cannot have desires they therefore cannot have interests. What makes Frey vulnerable to criticism in this respect is his insistence that having desires requires belief and self-consciousness, and furthermore, that both belief and self-consciousness presuppose linguistic ability. (Frey, 1980: 101) Let us first consider the claim that having desires requires self-consciousness. Thus, in reference to Tom Regan’s 'Fido bone-profile,' Frey writes:

The dog simply desires the bone but is unaware that it simply desires the bone. It may be thought that there is nothing so very odd in this, in allowing the dog to desire without being aware that it desires; but it seems to me to raise a problem of a difficult order. In the case of human beings, unconscious desire can be made sense of, but only because we first make sense of conscious desire; where no desires are conscious ones,

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however, where the creature in question is alleged to have only unconscious desires, what cash value can the use of the term 'desire' have? (Frey, 1980: 104, emphasis added)

Hence, in effect, Frey is saying that because animals are not aware of their desires, these desires are therefore unconscious and thus not desires at all. But he is mistaken. It does not follow that because (1) 'Fido desires the bone but is unaware that he desires it' that (2) 'Fido's desire is an unconscious desire'. (Regan, 1982: 278) This does not hold because such an inference confuses "being-aware-of, with being-aware-that-one-is-aware-of one's desires." (Regan, 1982: 278)

Therefore, if Fido is aware of his desires, he is certainly conscious but his desires do not have to be an object of 'reflective consciousness' in order for us to say that they are in fact conscious desires either in Fido's case or in our's. "Thus, there "is no reason to believe that Fido, anymore than the rest of us, must be reflectively aware that he has those simple desires that he has in order to be aware of them." (Regan, 1982: 278)

Even if we concede to Frey's view that animals are not self-conscious, is it not true that those individuals who possess self-consciousness, that is, who are able to reflect upon their desires must first be aware of their simple desires before they
Therefore, what can only follow from Frey’s argument is that animals cannot be reflectively conscious of their desires, but what does not follow is that non-human animals cannot have simple desires given Frey’s argument. Of course this critique of Frey’s position has not proven that animals can have desires; it has only underlined that Frey’s analysis of desire has not proven it either. Therefore, some sort of positive account has to be given for attributing desires to animals.

III. Fido Can Have Desires, and Beliefs, and Interests

Fortunately, one does not need to provide a sophisticated psychological theory to validate the assertion that animals have desires as it is for the most part supported by the reality of our evolutionary relationship with animals and the continuity of mental experience which this relationship so strongly underlines. It would be doctrinaire to assume that a hard and fast line exists which allows us to attribute mental experiences to ourselves and deny them to the remaining majority of sentient creation. Hence, the best explanation of animal behaviour will have to include references to beliefs and desires, especially in the case of the higher animals.

It is difficult to satisfactorily explain both animal and human behaviour entirely in terms of a stimulus-response theory which
reduces all forms of behaviour to 'innate' or 'conditioned' responses to external stimuli. (Regan, 1983: 37) We have strong intuitions that the average individual has an abundance of beliefs and desires both of which we treat as functional states. Desires can be created in several ways; simple desires such as the desire for food, water, sex, avoidance or relief from pain are a consequence of deprivation and their intensity increases the longer they remain unsatisfied; and desires over and above these are created through their interaction with beliefs, with additional beliefs arising through their interaction with each other.6

We cannot deny such psychological states to most non-human animals given the evolutionary ties and numerous behavioural parallels between humans and the overwhelming majority of animals. Nevertheless, those who subscribe to very strong exclusionist accounts such as Frey steadily deny that such functional states can form any part of animal mentation. In particular, Frey contends that when someone believes something, what he or she believes is that a certain sentence is true. He begins to illustrate this point by asking what it means for example, if he were to believe that his book collection lacks a Gutenberg Bible:

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6This is Stephen Stich’s account of functional states presented in Regan’s The Case for Animal Rights.
Now what is it that I believe?...I believe that the sentence 'My collection lacks a Gutenberg Bible' is true. In expressions of the sort 'I believe that...', what follows the 'that' is a sentence, and what I believe is that the sentence is true...The essence of the argument is...about what is believed. If what is believed is that a certain sentence is true, then no creature which lacks language can have beliefs..." (Frey, 1980: 87, 88, 89-90)

However, such an argument is open to many objections. Belief cannot necessarily require linguistic ability because we very often believe things without devising sentence about them. (Sapontzis, 1987: 122) For example, if I glance at my watch, I believe that I have a watch on my wrist, but I do not formulate the sentence "I have a watch on my wrist therefore, I’m going to glance at it." (Sapontzis, 1987: 122)

Ordinary language usage undermines Frey’s argument that if an intentional verb is used in a sentence then it can only apply to those who can understand sentences. (Sapontzis, 1987: 121) We very often use intentional verbs in sentences when we are referring to animals. It is intelligible to say, ‘The dog thinks that there is someone outside,’ 'The antelope perceives that there is danger nearby', ‘The bear recognizes that her cub is hungry’. Such formulations could only be said to be untenable if we were using stipulative definitions of 'think', 'perceives', 'recognizes' which would be very counterintuitive to ordinary language usage. Animals do behave in ways that are entirely consistent with the assumption that they are able to 'think',
'perceive', 'recognize' etc., until perhaps they are subjected to forms of experimentation which totally frustrate and distort their natural behaviour patterns.

In general, Frey's view cannot account for innumerable situations in which what is believed is not collapsable into the belief that a particular sentence is true. (Regan, 1983: 41) If the object of belief is that a particular sentence is true then we are forced to conclude that young children cannot believe anything before they have learnt a language. But if children do not have any preverbal beliefs how can they begin their linguistic education? (Regan, 1983: 44-45) Thus, Frey's philosophical account of beliefs is radically at odds with our common understanding of beliefs as functional states, and it is therefore, difficult to ascertain why he persists in adhering to such an analysis of belief attribution.

Certainly, beliefs must have a behavioural component as well and we can therefore ascertain that individuals have particular beliefs partly through their behaviour. Frey and others, such as Stephen Stich dispute that we can determine the content of an animal beliefs in this way. To this effect Stephen Stich writes, On the one hand, we take beliefs to be functional or psychological states of quite a special sort. Beliefs are states which interact with desires, with perception and with each other...beliefs are states with content; they are propositional attitudes. If a state is a belief we expect it to
be a belief that something or other; we expect there to be some way of expressing its content. (Quoted in Regan, 1983: 49)

And Frey seems to suggest that animal behaviour is not expressive of anything psychologically meaningful when he argues,

I do not understand how behaviour can show that my dog possesses the belief that p unless that behaviour is connected with the belief that p in such a way that that same behaviour is not compatible with the belief that q or that r or that s...For example, my dog wagged its tail furiously when its master was at the door but also when its lunch was about to be served...(Frey, 1980: 114-15)

However, both Stich and Frey have overlooked the context within which actions take place, without which, the phenomenon of behaviour only appears as a series of movements in the case of both animals and humans. (Regan, 1983: 68) Regan illustrates this important point very well by comparing Fido’s case with that of Mary the human. Suppose Mary, like Fido hears a noise and approaches a door. We cannot determine much from the fact that Mary has walked to the door unless we consider the wider context within which her action took place. Did she approach the door with hesitation, or excitement? Was she awaiting her best friend? Thus, seen in context, Mary the human’s actions do not appear mechanistic, or random, but are expressions of psychological states of beliefs and/or desires.

Similarly, in Fido’s case his tail-wagging suggests nothing if it is seen in isolation; if Fido has repeatedly wagged his tail
in the past when he hears a noise at the door, we can reasonably assume that he is expecting his master (or some other dog) who is known to be his amiable companion? Thus, "It is the known association between his wagging his tail, given relevantly similar circumstances and his having shown by his past behaviour in such circumstances that he has certain expectations associated with his master being at the door, that provides the grounds for our attributing this belief to him now." (Regan, 1980: 68-69)

However, Stich raises one more interesting objection which he thinks should make us wary of too readily attributing beliefs and simple desires to animals. He states that in order for us to have a belief about something we must also have a concept of that belief. According to Stich, Fido the dog cannot be said to have a concept of bone because he would not be able to recognize all bones as bones; for example, he would not be able to recognize the bone of the middle ear as a bone, or he could be plausibly duped by imitations of bones. (Regan, 1983: 50) It must be emphasized that humans are just as fallible in this respect. A concept is still valid even though some may have a more sophisticated understanding of a concept in comparison to others.

Herein one has to ask what it is that exactly informs a concept
in order to explain the fact that despite our different levels of comprehension we nevertheless can have a shared understanding of a concept. So for example, if a child "who knows nothing about chemistry does not therefore have an entirely different concept of milk or of a bottle than we do." (Regan, 1983: 79) Similarly, in a case that would involve Fido; if he scratches at a door to be let out and he immediately begins digging at a spot where he saw someone burying a bone, his behaviour demonstrates intention and expectation through which he has expressed a preference-belief that he wants the bone in order to satisfy his desire for a particular flavour. (Regan, 1983: 79)

A stimulus-response theory of Fido's actions cannot capture the fact that he initiated an action to satisfy a desire based on a belief that what he had seen and perceived was a bone; moreover, Fido would not have had the desire, nor the belief had he not had the concept of a bone. Thus, because Fido demonstrated intentional behaviour, he cannot be likened to a plant bending towards light as a plant is only reacting to external stimuli, and unlike Fido, cannot act, but can only be acted upon. (Regan, 1983: 80) Frey's, and at times Stich's, excessive skepticism has erroneously led them to deny the rudimentary, functional states of simple desires and beliefs to animals. Moreover, there is a certain economy of understanding animal mentation in terms of concepts, desires and beliefs. David Griffin makes this point forcefully when he writes:
Environmental conditions vary so much that for an animal’s brain to have programmed specifications for optimal behaviour in all situations would require an impossible lengthy instruction book...Providing for all likely contingencies would require a wasteful volume of specific directions. Concepts and generalizations, on the other hand, are compact and efficient... It seems plausible that when an animal faces new and difficult challenges, and when the stakes are high -- often literally a matter of life and death -- conscious evaluation may have real advantages... (Griffin, 1984: 49-51)

It becomes evident that an entity which can act to fulfill its preferences has an understanding of causal relations. These relations may range from highly complex examples to simple ones. For example, a farmer must take into account a vast network of biological, chemical, geological, meteorological, and political relations in order sustain his activity. But deer seeking a path around a recent avalanche to reach their traditional summer pastures and mice learning to press a bar to get food pellets from a psychologist are also aware of relations, even though they are simpler in nature. (Sapontzis, 1987: 132)

Exclusionists therefore wrongly insist that having an epistemic relation to one’s interests necessarily demands a host of other things such as temporal awareness, awareness of complex issues, the ability to deliberate, and culture. (Francis, Norman, 1978: 507-37; Williams, 1980: 149-61) These form certain kinds and degrees of awareness and understanding and not a definition of awareness, which is essentially displayed by some degree of
perception and understanding of the circumstances one faces.

The various exclusionist accounts analyzed above deny that animals can have interests generally because these arguments rest upon a very negative evaluation of animal mentation and furthermore, they depend upon interpretations of beliefs and concepts which are radically at odds with even our understanding of human motivation and behaviour. The exclusionists' reluctance to understand animal mentation in terms of emotions, awareness, desires, concepts and beliefs often leaves them at a loss to explain, for example, how they can be so confident to deny animals such subjective mental states yet be supportive of the use of many animals in behavioural and biomedical research in which animals are used precisely because they are capable of experiencing physical as well as mental pain and deprivation. Such an embarrassing paradox only further suggests that the humanists' radical skepticism of animal mentation is in the final analysis, groundless.

IV. Interests and Moral Equality: The Moral Significance of Human Relational Characteristics

The extent of conflict between the interests of humans and non-human animals varies in intensity, and where there are no genuine, intractable conflicts of interests, it would not be
justifiable to compromise the interests of animals for the sake of human expediency, desire or enjoyment. Central to such a perspective is the belief that as sentient, autonomous beings non-human animals do express a will to live and possess an independent value of their own given that the vast majority of them are not simply biological entities which exist in a vegetative state, but individuals who are capable of conative and subjective mentation and who as such are able to experience life in a biographical sense.

However one cannot argue that there is an equality of interests between the human and non-human animal. As Peter Singer writes, "it is not arbitrary to hold that the life of a self-aware being, capable of abstract thought, of planning for the future, of complex acts of communication, and so on, is more valuable than the life of a being without these capacities." (Singer, 1975, 1990: 21-22) However, Singer and other utilitarians rightly remind us that beings who have fewer and/or different interests cannot thereby be excluded from the moral domain. "The egalitarianism of utilitarianism requires only that the interests of each individual be given equal consideration in computing the pluses and minuses of the moral calculus." (Sapontzis, 1987: 135, emphasis added) Singer provides us with the essential elements of a greater-value principle which upholds human life as more valuable than animal life. Certainly,
our deliberative capacities enable us to form complex and meaningful external relations etc., all of which make humans feel the misfortune of death more keenly than do animals.

However, the greater-value principle can be only defensively employed in exceptional cases in which the conflict between human and animal interests is irresolvable; that is, should animal interests be upheld, human interests stand to be mortally threatened. While all lives are certainly not of equal worth, non-human animals do express an acute interest in their continued existence and therefore, a greater-value principle must be heavily qualified so that it can only stand as an auxiliary moral principle rather than a general moral postulate. Any inflation of the greater-value principle over and above these restricted instances is bound to rob this postulate of its moral import and reduce it to a mere rhetorical device.

Certain crucial forms of biomedical research force us to appreciate the moral importance of human relational characteristics. Even though all humans may not have the higher capacities of abstract thought, of planning for the future etc., relational characteristics do justify the fair compromise of animal interests in instances where human interests stand to be mortally threatened should such research be abandoned for lack of alternatives to the animal model.
We can give human interests greater weight than animal interests in these cases not so much "in virtue of the supposed differentiating properties, but because human beings have certain relations to other human beings which they do not have to animals." (Francis and Norman, 1978: 508) A human being has the ability to form a wide range of relationships which does not enable us to see one another other than in relational terms, and thus, "to think of oneself as human is not to think of the biological classification one falls into, but to think of oneself as a point in a network of overlapping relations actual and possible, with other individuals." (Benson, 1978: 536)

The significance of these relationships lies in the fact that they create moral claims between us, therefore, we cannot view one another solely in terms of non-relational characteristics such as the ability for sentience, rationality, moral agency, free will etc. My relation with another human reaffirms my identity, and furthermore, my relation to that person creates an obligation towards him so that even though he does not possess all the characteristics which would distinguish him from a non-human animal, I have, moral responsibilities to him by virtue of his relation to me."

However, the very authors who make this point overstate their case. For example, Benson, Frances and Norman emphasize the moral significance of our ability to form economic and political relationships and claim that these further underline how much
Certainly kinship ties create a powerful reason as to why we cannot see one another in purely non-relational terms. These relations are grounded upon love and nurture and are fundamental to the preservation of human society and to our species; thus, such relations do weigh human interests over animal interests in a morally significant manner and furnish a sound justification for the fair compromise of animal interests in vital, life-threatening research where there are no alternatives to the animal model.

It has been assumed that the non-human animal's possession of interests enables it to be considered as a beneficiary of the fundamental right to life and the right not to harmed which are defeasible in restricted circumstances. The next section involves a discussion of how interests form the determinative characteristics of these rights.

V. Transcending the Will Theory: The Interest Theory of Rights

Legal theorists have analyzed rights primarily in either terms...
of will or interests. According to the will theory, rights "are inherent attributes of the human will." (Paton, 1972: 287) The purpose of the law is to protect and grant powers of individual will. (Paton, 1972: 288) However, the law ultimately cannot be created out of nothing and must therefore be concerned with the opposed desires of determinate individuals or entities, and therefore will cannot be the only essential element of a right. (Paton, 1972: 288)

Thus, those who defend the interest theory of rights maintain that individuals may have rights, but not wills -- babies, the mentally challenged, etc., all lack wills of their own, but nevertheless demonstrate a will that is operative "for the law sets up a guardian to protect the rights of the child, [and] a committee in the case of the lunatic..." (Paton, 1972: 289) The reason why these individuals still can have rights is because they possess a well being which can be diminished or enhanced in relation to the frustration or fulfillment of their preference and welfare interests; in short, they are still capable of being harmed in many of the same ways as individuals who possess a contra-causal will.

Thus the element of interests does not necessarily conflict with the element of will. In the case of a moral agent, for example, the subject of a right is also its administrator; but an
individual can be the passive subject of a right as the law can appoint an administrator in cases where subjects have no will to protect their interests. As has been mentioned, Kant greatly exaggerated the importance of human will as a basis of rights-possession. The Kantian moralist provides a model of self-legislation at the heart of which lies the critical capacity to "will a universal" moral law wherein all actions are considered moral only if they can be universalized. But, once this capacity for legislating a universal is lost so is any justified claim to any sort of recourse to any possible mistreatment. (Hanula, R.W. & Hill, P.W., 1977: 248)

However, the whole corpus of contract law provides an excellent counterexample to Kantian prescripts for rights-possession. A valid claim may very well exist independently of any universal law. Contract law effectively implies that it is not necessary for a person to have this capacity in order to enter into an arms-length transaction. Legal claims against others are therefore not contingent upon a rational capacity to will a universal law and thus, contract rights serve to refute the Kantian condition that an individual be able to will a universal in order to qualify to have a justified claim against someone or to something. (Hanula, R.W. & Hill, P.W., 1977: 248) Thus, the insight to be gleaned here is that if a Kantian moralist is to insist on a universalization principle then any such
universalization can apply only to the morality of a claim and not to the capacity of either party to will a universal. (Hanula, R.W. & Hill, P.W., 1977: 248-49)

In addition, the well-known Quinlan case serves as a further counter-example against the proposition that rationality is necessarily a determinative characteristic of rights. For unclear medical reasons Karen Ann Quinlan fell into a comatose condition which was described as a "persistent vegetative state." The New Jersey Supreme Court having recognized that Karen’s case was bound to be irreversible, agreed that her father may exercise her right to privacy and declared, "...we have concluded that Karen’s right of privacy may be asserted on her behalf by her guardian under the peculiar circumstances here present." (Quoted in Hanula, R.W. & Hill, P.W., 1977: 249-50)

Hence, the absence of will did not require the forfeiture of Karen’s right of privacy as she still possessed legally identifiable interests. The reasoning of the Quinlan court thus provides a clear instance where rationality is not deemed a necessary feature for the possession of rights. The legal fiduciary concept of guardianship was utilized in the Quinlan case and as such, Karen Anne Quinlan’s right to privacy was left intact; thus the concept of guardianship can also facilitate the case for animal rights.
Moreover, the will theory of rights holds fast to the correlativity doctrine and it is thus claimed that duties and rights are inextricably linked. This implies that only moral agents can possess rights because only they have the ability to abide by duties. However, the rules in respect to third-party beneficiaries within contractual law are an illustration of how such a correlation need not hold in order for us to claim that a right can exist.  

Typically, in a third-party beneficiary contract, the promisee demands a promise from the promisor for the benefit of some other entity who has a legal right against the promisor even though he has no corresponding duties to any rights arising from the contractual agreement. Another manifest instance of this is to be had in the function of unilateral contracts in which the promisee has a right without a corresponding duty when the contract is made. (Hanula, R.W. & Hill, P.W., 1977: 254) Thus, while it is correct to demand that one must be a moral agent in order to be party to any sort of contract, it does not follow that every instance of right-bearing necessarily implies the fulfillment of a duty.

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Hence, the above counter-examples readily suggest that the element of rational will has not formed the determinative characteristic of all instances of rights-possession and moreover, we cannot insist that there is a correlation between rights and duties in every example of right-bearing. Perhaps a much less emphasized, but more salient point is that even though claim-rights involve the logical correlation between rights and duties, the rights involved would nevertheless "remain prior to, or more basic than, the duties with which they are necessarily correlated." (Feinberg, 1970: 250, emphasis added) The individual who possesses the claim-right has the 'upper-hand' as he/she has the option of whether or not to exercise his right, take action against its infringement, or absolve the corresponding duty-bearer from his/her duties should there be no legal sanctions against such a release. (Feinberg, 1970: 250)

Thus, a simple statement of a correlation between rights and duties does not provide us with an accurate account of the nature of rights. Therefore, it has been noted that not all rights have corresponding duties and secondly, rights are prior to their correlative duties. Furthermore the correlative feature of rights demands the presence of a duty-bearer, but the entity who is a rights-holder need not have the capacity to fulfill duties, nor as has been suggested above, even have the ability to make the claim that his/her right entails.
In this respect the non-human animal is no different from the above examples of non-paradigmatic humans because it is often argued that as animals cannot reciprocate a duty for the conferral of a right, they cannot qualify to have a right as they lack the capacity for moral agency which would otherwise enable them to conform their behaviour with the performance of a duty. Present animal welfare legislation reflects this perspective; for example, anti-cruelty statutes state duties regarding animals, but not duties to them as animals are not considered subjects of legal rights.

Proponents of the will theory maintain that both non-paradigmatic humans and animals cannot be rights-bearers because they cannot make claims on their own behalf, nor fulfill corresponding duties. Undoubtedly, if none of us were moral agents, we could not conceive of any form of morality let alone a system of rights, but as was suggested above, this does not imply that every individual has to be both the subject and administrator of his/her own right as the law can make a will operative on behalf of those who lack it. The cases involving marginalized humans are compelling in the sense that if we are prepared to admit non-paradigmatic humans into the class of rights-holders, the criteria will in all probability yield a set of common denominators sufficiently wide enough to also allow at least some animals of similar capabilities into that same
Conclusion

The preceding exposition was concerned with extending the moral circle to include the non-human animal, first on the basis that the overwhelming number of animals possess interest-bearing capacities and secondly, because interests form the determinative characteristics of certain basic moral rights. Once we acknowledge that individual rights are upheld in many instances irrespective of what is traditionally emphasized by will theorists, it becomes obvious that rights are often honoured and extended to protect individual interests which are valued just as much, if not more than what the will theory of rights suggests.

It has been suggested that there are no epistemic problems in respect to the interest-bearing capacities of non-human animals because "interest-bearing is empirically ascertainable." (Hanula, R.W. & Hill, P.W., 1977: 264, 266) Furthermore, the applicability of ordinary language analysis to animal behaviour, and the universal demonstration of aversive behaviour on the part of animals to noxious stimuli strongly suggests that it is not anthropomorphic to claim that animals express preferences.
Animals sometimes do choose what is not in their interests, just as humans do. (Rollin, 1989: 258) However, this is not to say they do not have interests, but rather to suggest that there is value in distinguishing between preference interests and welfare interests as animals, like humans, possess both. Preference and welfare interests are essential to an individual's well-being as the harm or benefit done to an individual is a function of the frustration or fulfillment of these interests; and this is true of human moral agents and of both human and animal moral patients because both are capable of experiencing similar harms.

It has also been argued that inflicting a harm upon an animal, be it either suffering or death, can be only justified in exceptional cases because animals express a will to live. The moral significance of human relational characteristics was discussed in this context, and it was suggested that it is impossible to perceive ourselves in purely non-relational terms; if we could, we would have no reason to make moral claims. But certain highly restricted forms of life-threatening research do rightly underline the moral relevance of human relational characteristics and justify the fair subordination of the interests of animals should there be no alternatives to the animal model.
CHAPTER 4

RIGHTS, UTILITY AND THE RESEARCH ANIMAL

The focus of this chapter is to explore how deontological and utilitarian factors affect the position of the research animal. It will be argued that the ethics of animal experimentation need to be informed by both rights and utility-based factors. The vital interests of animals need to be expressed in the language of rights so that their interests are not compromised for incremental gains in aggregate welfare, nor for gains which are large, but nevertheless dispensable in nature. Certain crucial forms of animal experimentation do require us to attempt a successful integration of the vital interests of both research animals and those of beneficiaries of animal experimentation and therefore utilitarian considerations will need to qualify the claims that non-human animals possess the fundamental right to life and the right not to be harmed.

However, the need for external control over animal experimentation is necessitated by certain key ideological assumptions of the scientific and medical establishment which prevent a serious, objective consideration of the interests of animal research subjects and this conflict is further complicated by the defects of the local review committee system which necessitate the need for a constrained strategy towards
I. Utilitarianism and Moral Rights

There has been a voluminous debate on whether a utilitarian framework can accommodate moral rights in any meaningful way. Most utilitarians who have no affiliation with unconstrained versions of classical utilitarianism would agree that there is no fundamental incompatibility between utilitarianism and moral rights. John Stuart Mill, for example, defended utilitarianism as he simultaneously defended rights to free speech and freedom of action within the context of his harm principle. (Brandt, 1984: 1) Moreover, the major definitional views of rights presented by contemporary philosophers such as H.L.A. Hart, David Lyons, Joel Feinberg and D.N. MacCormick do not suggest that such conceptions of rights are antithetical to utilitarianism particularly those conceptions of rights which are modelled on the interest theory. (Brandt, 1984: 2)

It is, however, true that some definitions of rights are obviously incompatible with the normative thrust of utilitarianism. For example, rights that are claimed absolute, and rights which are modelled on a strong account of the will theory treat individual autonomy as ultimate and sacrosanct and will thus remain in direct opposition to any concept of the good; Nozick's Anarchy State and Utopia exemplifies this conception of rights as 'side constraints,' that is, as
stringent limits to the interference of an individual's autonomy.

In addition, rights which are claimed to be self-evident are incompatible with utilitarianism. However, the general claim that utilitarianism can accommodate legal rights is nothing new because it is readily assumed in legal, economic and political theory. (Lyons, 1982: 112) Bentham was willing to concede even this though his analysis of rights as "fruits of the law, and of the law alone," neither "follows from a principle of utility nor entails it." (Lyons, 1982: 111) Therefore, it is better to pursue this matter in the spirit of Mill, who did not share Bentham's theoretical revulsion of moral rights, but was willing to accommodate deontological principles into his utilitarian thesis.

As has been suggested, a right is a valid claim, that is, "to have a claim to something and against someone..."¹ whether it is articulated legally or morally, and irrespective of whether it is modelled on the will or interest theory. The question before us is whether utilitarianism can consider such a definition of moral rights. Although there are several versions of utilitarianism, some friendlier to rights than others, they all

nevertheless treat the maximization of aggregate welfare as morally basic; whatever their genus, utilitarians emphasize the value of the aggregate in addition to the allied notion of principles of the good, and affirm the priority of the good over the right.

As the maximization of welfare is assumed to be the ultimate value, utilitarians will include all creatures with interests in the calculation of the general welfare. Even so, the maximizing feature of the doctrine paradoxically undermines the moral protection that any one individual can potentially enjoy and consequently renders the theory an essentially unconstrained goal-based doctrine. (Sumner, 1987: 175) As the maximization of the aggregate good is morally decisive in a utilitarian framework, individual and localized losses are deemed acceptable in order to achieve net overall gains. Generally speaking, the impersonal dimension of consequentialist theories implies the use of a cost/benefit analysis as part of the justificatory procedure needed to weigh losses against gains for the sake of securing the most favourable overall outcome. Thus, the goal involved in maximizing the aggregate good demands that local goods be dispensable or replaceable. (Sumner, 1987: 175-76)

In contrast, the function of rights is to constrain efforts to maximize goals in that rights "confer upon their holders some
measure of security against the demands of the impersonal point of view by ensuring that they will not be routinely sacrificed for the sake of a more favourable outcome." (Sumner, 1987: 176) Thus, rights seem to have different normative function from principles of utility; rights have a constraining effect, whereas principles of utility have a maximizing function and it is this essential difference which is at the heart of the consequentialist/nonconsequentialist dichotomy. Utilitarians argue that the moral point of view is impersonal or global in nature and demand that particular cases be assessed by using a cost/benefit calculation; more importantly, utilitarians assume that the "moral weight of a harm is exhausted by its inclusion as a cost in a cost/benefit calculation." (Sumner, 1988: 163)

It is worth emphasizing that the utilitarian framework is insensitive to the intensity of a harm. But no one can plausibly argue that the magnitude of a harm is of negligible moral relevance to an assessment of a course of action. Right theorists are correct to argue that the wrongness of some harms cannot be reflected in a cost/benefit calculus and therefore, the moral magnitude of certain harms should restrain us from acting on the results of a straightforward cost/benefit calculation. Moreover, strict utilitarians are wedded to attributing some positive weight to all benefits irrespective of the methods used to obtain them, whereas rights advocates assign
no credit to benefits that are attained at the cost of infringing rights. (Sumner, 1988: 159-74) However, neither of these extremes notions is really sustainable though each clarifies the normative functions of utility and rights so that one may then begin a realistic integration of both utilitarian and deontological considerations and ultimately create a more defensible theoretical position on the ethics of animal experimentation.

Perhaps the best place to begin is to realize that deontological and utilitarian norms are not always easily distinguishable; this is so particularly if one is speaking of the objects or rights as components of good or welfare. (Gewirth, 1982: 160) Recall that utilitarianism is by definition a theory which holds that the only "fundamental basis for normative (or moral) appraisal is the promotion of human welfare." (Lyons, 1982: 107) How then do rights provide a basis for moral appraisal that is different from utilitarianism? There is no clear answer as rights and welfare considerations do not diverge entirely. However, there is one appreciable difference and that is rights as thresholds\(^2\) do not permit incremental gains in aggregate

welfare at the expense of an individual's entitlements or rights to the goods he requires for the fulfillment of his individual autonomy, or agency.

The maximizing criterion of utilitarianism is grounded in a straightforward cost/benefit analysis that is only sensitive to net gains and not to the magnitude of the costs that may be incurred by a determinate group of individuals in the effort to acquire a desired net gain. Furthermore, despite Bentham's egalitarian dictum, "Everybody to count for one, nobody for more than one," the maximization of utility requires that the subjects of moral rights be treated as an aggregate; thus, Bentham's proposition was really an expression of the utilitarian demand for impartiality rather than a statement of the moral distinctness of individuals which is a very fundamental element of a rights framework.

Of the many accounts of moral rights, the interest theory proves to be the least hostile to utilitarian reasoning as it explicitly interprets rights as components of human goods or welfare; and while not all moral rights considerations converge flawlessly with the requirements to maximize welfare the very basic assumptions of both the utilitarian and welfare-rights frameworks suggests that an important and powerful area of agreement exists for animal liberationists of both theoretical
affiliations. Theorists of both sides contend that a being has moral standing if it has interests and secondly, that interests-possession requires sentience; as the overwhelming number of animals have objectively defined interests, they therefore have moral standing. (Sumner, 1988: 164) This forms a key area of consensus for our purposes and it will be further discussed in the context of Tom Regan’s and Peter Singer’s animal liberation theses.

II. Animal Welfare and Animal Rights -- A Hidden Consensus

The animal welfare, or utilitarian perspective to animal liberation that is typified by Peter Singer’s work does not stand in such dramatic contrast to Tom Regan’s deontological defence as it may first appear. In his pioneering work Animal Liberation, Singer suggests that our moral concern for animals is rooted in a concern to maximize a principle of utility that is grounded in objective preference and desire-satisfaction. Moreover, as utilitarians are not averse to including all beings with interests in the calculation of the general welfare, species membership is treated instrumentally and does not influence the maximization of utility. (Elliot, 1987: 83)

Furthermore, Singer argues that because many animals possess self-consciousness and demonstrate the will to live, even their
painless deaths are definite losses, or frustrated preferences that must be taken into account in the utilitarian calculation. To pay no heed to the desires and preferences of animals constitutes 'speciesism,' which is defined as a "prejudice or attitude of bias toward the interests of members of one's own species and against those of other species." (Singer, 1975: 7) Tom Regan's deontological analysis reveals a similar appreciation of the animal condition as it takes into account the moral relevance of sentience and the related notion of interests; in so doing, he claims that living creatures have to be seen in terms of their individual capacities rather than their species membership. According to Regan, all individuals with capacities to form and satisfy preferences possess a desire to fulfill a "preference autonomy" in addition to possessing objectively defined welfare interests, that include interests in avoiding such harms as deprivation and death. Like Singer, Regan believes that more often than not, premature, painless death is a harm because it forecloses all possible opportunities to satisfy one's preferences.

According to Regan, all individuals with preference and welfare interests are "subjects-of-a-life," who possess equal inherent value. Thus, Regan's deontological analysis is essentially Kantian in nature because it treats all welfare subjects as having inherent worth, that is, as beings whose lives matter to
them independently of their value to other welfare subjects. The concept of inherent value assigns an equal de jure moral standing to all sentient individuals, though this does not imply that those with lesser interests will enjoy an equal de facto moral position when there is an intractable conflict of interests.

It is not speciesist to maintain that inflicting suffering and death on a psychologically more sophisticated being causes greater harm than on less mentally developed creatures as an "increase in psychological sophistication brings with it a wider range of interests, a greater ability to experience satisfaction (and dissatisfaction), and the possibility of leading a fuller life." (Hettinger, 1989: 124) But this cannot justify animal experimentation which is non-vital and painful in nature because such research demonstrates an unjustified subordination of the most vital interests of animals, who as 'subjects-of-a-life,' express a will to live and an aversion to the frustration of their desires and preferences.

The postulate of inherent value and its equivalent expression of 'subjects-of-a-life' are distinctly anti-utilitarian because they do not assign intrinsic value to the pleasures or satisfactions of individuals, but they instead underline the worth of an individual's autonomy independently of its
instrumental value to others. Thus, these axioms furnish a direct reason against the wrongness of harming or killing individuals, whereas utilitarian doctrines fail to do so.

Regan maintains that the egalitarianism of utilitarian doctrine is illusory in view of the maximizing criterion of utilitarian doctrine "which can fail to produce equal treatment of individuals when dissimilar treatment would maximize utility."³ Thus what appears in theory to be a direct reason for killing may be vulnerable to a similar criticism of classical utilitarian doctrine in that the preference-utilitarian’s separation of a person from desires leaves open the possibility that the strength of the desires of others may well outweigh the intensity of an individual’s own desires, and this may entail the killing of an individual or sacrificing his/her vital interests in order to maximize overall desire-satisfaction without any serious regard for that individual’s desire to live. (Frey, 1984: 12) Thus, even though utilitarianism counts as morally considerable the experiences of all sentient beings, the theory’s conception of individuals as receptacles of experiences and its moral premium on the best overall consequences do not provide us with direct reasons why it is prima facie wrong to

Regan initially states an abolitionist position on biomedical research involving the use of animals and in this respect he writes, "...the rights view will not be satisfied with anything less than its total abolition." (Regan, 1983: 389) However, the dynamics of Regan’s deontological framework reveals that his perspective on animal research is not abolitionist. He is prepared to allow the imposition of a harm upon an individual if upholding an individual’s *prima facie* right not to be harmed will cause a substantial aggregate harm. Hence, even though Regan’s interpretation of inherent value is anti-utilitarian, it is not anti-consequentialist. (Sumner, 1988: 167)

The only absolute right in Regan’s deontological framework is his right to respectful treatment. This right is an interpretation of his formal principle of justice which requires us to treat like cases alike unless a morally relevant difference suggests treating them differently. According to Regan, all subjects-of-a-life share enough of the same morally relevant capacities for all to have an equal and absolute right to respectful treatment and we violate this right when we regard individuals as replaceable receptacles of experiences.

However, we are not necessarily violating the right to
respectful treatment by violating the *prima facie* right not to be harmed as this is a defeasible right in Regan's deontological scheme. The significant point to note is that the circumstances "which will justify infringing the defeasible right not to be harmed must be consistent with the indefeasible (and basic) right to be treated with respect." (Sumner, 1988: 166) An obvious case in point is when the right of individuals conflict and we are compelled to choose between harming many or a few subjects-of-a-life, the right to respectful treatment demands that we override the rights of the few. (Regan, 1983: 305-07) A more challenging case could involve having to choose between severely harming a few individuals and harming a larger number of individuals less seriously; Regan would rightly conclude that we must override the rights of the larger group. Therefore, the right to respectful treatment requires us to consider the magnitude in addition to the aggregate of a harm, whereas utilitarian directives would be indifferent to either option because the aggregate is the only morally decisive factor in a utilitarian framework.

Regan's right to respectful treatment is also sensitive to the possibility that similar harms can be of different magnitude to different individuals. (Regan, 1983: 309-10) For example, because death forecloses more opportunities for satisfaction to normal adults than to individuals with fewer capacities (and
hence fewer interests), death is a greater harm when imposed on the former group. (Regan, 1983: 202) Thus, Regan's absolute right to respectful treatment conditions his (defeasible) right not to be harmed so as to establish it as an independent constraint against utilitarian considerations to maximize aggregate welfare. If Regan had not outlined an absolute right to respectful treatment, his (defeasible) right not to be harmed would become easily absorbed by a straightforward utilitarian cost/benefit analysis, and hence fail to form an adequate threshold against the pursuit of incremental gains in welfare. Regan's right to respectful treatment has parallels with Singer's principle of equal consideration of interests as neither implies the identical treatment of all subjects-of-a-life, but both require that the interests of non-human animals be given "the same consideration as the like interests of any other being." (Singer, 1975: 5, emphasis added) Furthermore, both Regan's and Singer's views are grounded in the element of interests which implies that all beings possessing the capacity for experience enter the arena of moral concern and "moreover they enter it with a fundamentally equal moral status..." (Singer, 1975: 5, emphasis added) The insight to be gleaned here is that even though both postulates are morally rigorous, they remain sensitive to the critical information that is needed to make a morally responsible decision in circumstances in which the vital interests of human and non-human conflict.
Regan outlines the conditions which are needed to override the prima facie right not to be harmed in a set of collateral principles which together comprise his constraints on utilitarian aggregation. (Sumner, 1986: 432) Apart from very restricted circumstances, infringing an individuals' right to be harmed cannot be justified by an appeal to maximize aggregate welfare. As has been noted, Regan's respect principle is exceptionless and absolute; but most of the work is accomplished by Regan's harm principle, which is defeasible in what Regan terms "prevention cases," where we must inflict harm on some innocent individuals to prevent harm to other innocent individuals.

These prevention cases must satisfy the "miniride" and/or "worse-off" principles. The miniride principle suggests that when each individual would suffer an equal harm then we should try to prevent the greater number of individuals from experiencing the harm. According to the worse-off principle, when some individuals would suffer a greater harm than others we should prevent the greater harm, irrespective of the number of individuals who will suffer. (Sumne, 1986: 433) Thus, the miniride principle is aggregative because it calls our attention to equal harms and the worse-off principle is non-aggregative as it considers the inequality of harms and so underlines the magnitude of a harm.
The miniride principle is the more straightforward of the two; it states that in a situation of equal harms, we can look to numbers to determine the right course of action. The worse-off principle is more complex and stipulates that whenever harms are unequal, by however little, we have to disregard numbers. Some might argue that this is too stiff a price for simply avoiding a possible utilitarian aggregation. Whatever one’s conclusion in this regard, Regan’s moral framework does not, by in large, yield counterintuitive results. To illustrate this claim let us evaluate two preventative cases that involve unequal harms:

CASE A
A million animals are caused intense suffering in order to save one human from mild suffering.

CASE B
One animal is caused mild suffering in order to save a million humans from intense suffering. (Sumner, 1986: 433)

The worse-off principle would demand that we consider not the numbers, but the magnitude of the harm and so accordingly, we would be compelled to forego CASE A and approve CASE B. (Sumner, 1986: 433) Alternatively, let us imagine a scenario involving equal harms.

CASE C
A million animals are caused mild (intense) suffering in order to save one human from the same suffering.

CASE D
One animal is caused mild (intense) suffering in order to save a million humans from the same suffering. (Sumner, 1986: 432)

Regan’s miniride principle would lead us to reject CASE C and
justifies CASE D. Thus, as Regan's moral framework unfolds, it becomes clear that his approach to biomedical research is not abolitionist despite his initial claim. As this analysis has attempted to show, Regan's position on biomedical research is much more utilitarian than he is prepared to admit. His moral framework commits him to a case-by-case analysis of experimental protocols, as does a utilitarian cost/benefit analysis, but Regan's moral scheme is also rigorous enough to categorically condemn areas of animal research which inflict serious harms on animals for the sake of benefits which are expendable.

And thus, this discussion of Singer and Regan's animal liberation theses has illustrated that the careful integration of both deontological and utilitarian considerations ensures that the evaluation of an experimental protocol will be sensitive to the magnitude and aggregative features of a harm both for the subjects and beneficiaries of the research that is in question. The adoption of a paradigm that expresses both elements of utilitarian and deontological directives should certainly introduce much needed rigour to local experimental review which is often obstructed by ideological assumptions and structural shortcomings that ensure a strong presumptive case in favour of the researcher and a negligible consideration of the vital interests of animal research subjects. The next section will be devoted to a discussion of this unfortunate reality.
III. Reviewing an Experimental Protocol: Obstacles to Objective Evaluation

A. Ideological Assumptions

The luxuriant assumptions that science is value-free and that knowledge is an absolute value have allowed scientists to demonstrate an aversion to valuational judgements, which itself is ironically an emphatic valuational commitment to an ideology of science. (Rollin, 1989) Science we are repeatedly told, deals only with facts gathered from experimental observation; if science is grounded in any values it cannot remain empirical or 'objective.' But this is an implausible claim. When we ask, "What is to count as a fact?" we are faced with having to make subjective value-judgements despite what scientists adamantly claim. Facts by definition cannot change, it is rather what is valued as a fact that changes.

In general, the ideology of science engenders a great deal of incoherence in the conduct of experimental research. One of the most glaring paradoxes has already been alluded to, namely that researchers will deny that animal and human pain are significantly analogous, even though their research logically presupposes that animals do feel pain and experience mental states which are significantly similar to those that are present in humans. It seems illogical to test dose responses to
anaesthetics and analgesics on animals in order to understand their potential analgesic effects in humans, and yet simultaneously deny that there are at least some significant analogies between animal and human pain. (Rollin, 1989: 115)

In addition, the use of animals in psychological research is an excellent illustration of this ideological commitment to physicalize animal pain and suffering. Many psychologists who are not absolute behaviourists nevertheless deny human mental states such as fear, anxiety and depression to animals on grounds that it is anthropomorphic to do so; yet their work has to bear an implicit reliance on such attributions if they are to claim that their investigations provide insights into human nature, otherwise it would be preposterous to conduct such research on animals. (Rollin, 1989: 116) As has been previously discussed in Chapter 2, this sort of denial reached its extreme with Descartes and the Cartesians who completely denied that animals possessed any consciousness; although such complete skepticism of animal mentation has lost all credibility, it has nevertheless contributed to a steady trend in reductionist and positivist thinking in virtually all fields of scientific activity and has had derisive effects upon the study of animal consciousness. (Rollin, 1989: 66)

The case of animal pain remains paradoxical in contemporary science as researchers presuppose the existence of animal pain
to justify the use of animals as research subjects, but ideologically maintain that animal pain is not an experiential state. However, if pain were not an experiential phenomenon, its infliction would not raise any moral questions. This psychic and morally relevant component of pain is however, virtually never discussed. On the contrary, the scientific community has encouraged the physicalization of animal pain and stress and consequently, it is perceived as a mechanical physiological or neurophysiological occurrence rather than as a subjective experience. (Rollin, 1989: 123) Such a perspective acknowledges the existence of the physiological aspects of pain, while avoiding the matter of how the animal research subject feels. (Rollin, 1989: 123, 128)

The physicalization of animal pain however creates conceptual difficulties which are associated with the denial of subjective mental states in the non-human animal. It is impossible to contend that a non-human animal can physiologically respond to a noxious situation without initially having had conscious experience of it. An animal's mental experience of a noxious situation must be causally responsible for the chain of physiological responses that occur, and not its converse. In addition, the physicalization of stress creates the same type of incoherency. Researchers choose to understand animal stress in purely physiological terms as part of their attempt to keep
science 'value-free' ie. non-subjective. However, "the physiological description of the animal body under stress does not define stress..." (Rollin, 1989: 127) Thus such a Cartesian-like explanation of stress as some purely mechanical, physiological phenomena is completely inadequate as it confuses indications of stress with stress itself. (Rollin, 1989: 127-28)

Hence, the reductionist and positivist aspects of scientific investigation have created some considerable intellectual confusion and a consequent skeptical attitude towards animal pain as a subjective experience. As a result, there is little felt need to discuss which cases justify the infliction of pain, and secondly to define what are ethically acceptable levels of pain. The palliative effects of this ideology of science greatly obstruct a fair consideration of the costs to the animal research subject; such an appreciation only can begin with a total rejection of physicalistic reductionism, and as the next section suggests, a disavowal of knowledge as an absolute value.

B. Knowledge as an Absolute Value

The treatment of knowledge as an absolute value is very much at the heart of scientific ideology and therefore requires some special discussion. It should be noted that the value of knowledge becomes an issue in research that does not affect the
vital interests of potential beneficiaries of scientific and medical investigation. (Midgley, 1981: 319) However, as the overwhelming amount of animal experimentation is non-vital in nature, the value of knowledge becomes a matter of cardinal concern particularly because current levels of research on animals involves extremely high costs to animal research subjects, and yield benefits which are largely dispensable.

The claim that knowledge is an absolute value is implicit in much scientific and medical research. In this respect, one need only note how thoroughly averse researchers are to any proposals involving the imposition of legal constraints on animal experimentation. The celebration of knowledge as an absolute value has of course also received grandiloquent, formal defences. George Steiner, for example, wrote that even though knowledge may be useless, or even dangerous, it should nevertheless be pursued because 'the truth matters more than man'. (Midgley, 1983: 320)

The postulate of knowledge as an absolute value embraces no "statable principle of selection" that can enable us to distinguish the banal, random gathering of facts, from the

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collection of crucial data that may, for example, be needed to understand a pressing problem. The indiscriminate nature of a postulate which treats knowledge as an absolute is also insensitive to the specific costs that must be incurred in the pursuit of such a disinterested quest. Costs do matter, especially if they involve the sacrifice of the vital interests of individuals, be they either human or non-human animals, as both express an intense will to live. However, the postulate of knowledge as an absolute value ignores the significant relationship between the costs and benefits ratio of an experimental protocol and consequently, to a disturbing degree, the acceptability of a research proposal is "determined by habit, by the methods that have become familiar in recent research and by the tradition of the journals." (Midgley, 1981: 321)

Moreover, the abstract pursuit of "knowledge for knowledge sake," may appear to be sublime, but upon analysis, lacks significant intellectual merit as it fails to embrace any innovative standards and often becomes an obsession with the boring and the pointless -- or even the obscene. In contrast, genuine inquiry is very selective, and "obsession is often its servant, but never its master." (Midgley, 1981: 321) The rather ill-defined, abstract pursuit of "knowledge for knowledge sake" does not tell us what questions are worth asking or the best
means of answering them. Thus, for example, as far as the pursuit of scientific and medical knowledge is concerned, one should ask whether it need be so heavily dependent upon drastic, invasive, and painful animal experimentation, instead of upon more thought and observation. (Midgley, 1981: 324)

Isolation and maternal deprivation experiments are cases in point. These were begun by Harry S. Harlow and his colleagues in 1961; the purpose of these experiments was to study depressive behaviour in infant rhesus monkeys. Harlow and his colleagues demonstrated their hypothesis through the solitary confinement of these infant monkeys in vertical steel chambers for extended periods of forty-five days in order to observe how such extreme social deprivation could permanently frustrate and destroy their normal patterns of behaviour. At first these experiments were of tremendous interest as they enabled Harlow to refute the claims of crude behaviourism and they succeeded in so far as they established the presence of dominant and particular social tendencies in the offspring of rhesus monkeys.

However from both a scientific and ethical perspective, "it is not enough to show that the research proved its point, we need to show that it was the best or only available way to prove it." (Midgley, 1981: 325) The central contention of crude behaviourism was that all social development was a product of
conditioning. However, the universal nature of this claim indicates that it could have been critiqued and refuted in any number of ways, and without having to subject monkeys to such disturbing conditions. (Midgley, 1981: 325-27) One could through systematic argument prove that the theory was at odds with the most commonly observed realities of social life. Chomsky for example, had successfully refuted the central claims of crude behaviourism by indicating that the capacity for speech must have an innate basis. (Midgley, 1981: 325) Furthermore, Konrad Lorenz had already established a methodolgy to observe non-conditioned behaviour. The belief that observation was ‘anecdotal’ and less scientific than such severe animal experimentation had been completely exploded by this time. (Midgley, 1981: 326)

In short, the reductionist, positivist and behaviourist approach to animal research retards a holistic understanding of the animal condition and encourages an objectification of the animal research subject. Consequently, animal pain and stress are physicalized and well in conformity with the scientific and medical research establishment’s implausible ideological commitment to pursue disinterested knowledge as an absolute value and to keep science ‘value-free’.
C. Defects of the Decision-Context

The fundamental ethical questions underlying animal experimentation are rarely addressed by the scientific and medical establishment because of the entrenched ideological assumptions discussed above, and secondly because of the nature of the decision-context within which experimental protocols are considered. This decision-context is almost entirely subjective as it is vulnerable to an array of contingencies which have the net effect of increasing the vulnerability of research subjects and creating a strong presumptive case in favour of the researcher. The process by which research proposals are created reveal that the influence of such factors as career pressures, current theories, research institutions’ funding policies, and the capriccio of public pressure and political agendas effectively deflect deliberation away from the ethical propriety of vivisection. (Sumner, 1987: 188)

The review committee system which has been used for research on human subjects is fraught with problems, but American federal laws, for example, do place substantive constraints on research involving human subjects and therefore, the defects of the system are not seriously compounded by local contingencies. The

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review committee system has not however formed any mandatory part of the legal regulation of animal experimentation; the system proves to be an unsuitable means of regulating vivisection, unless it can be coupled with serious legal protection for animal research subjects.

Moreover, the traditional review committee system is structurally biased to favour the position of the researcher as the majority of the members is usually comprised of individuals who are themselves in the same field of study as the candidate whose protocol is being assessed. The reason for their inclusion is of course for purposes of expertise without which the scientific validity of a research proposal would be hard to determine. However, "their very expertise in the area is likely to mean that they share the investigators' belief in the importance of the expected outcome." (Sumner, 1987: 189) Thus, the effect of such a membership is to discourage challenges to accepted practices and models of experimental design within the domain in question. (Sumner, 1985: 189)

Furthermore, a rigorous cost/benefit analysis of the risks (harms) to the research subject and the projected benefits of a research protocol cannot be satisfactorily undertaken as the review committee to his position cannot therefore afford to be impartial. Thus, the "danger here is not generally deliberate
distortion, but rather selective perception." (Sumner, 1985: 189) This inclines the initiator of the protocol to exaggerate the significance of anticipated benefits or results and to downplay the risks (harms) to the research subjects. (Sumner, 1985: 189) Thus the structural bias in favour of the researcher within the review committee system enables either him/her to readily make their case, or overstate it, without much opposition.

Neither does the inclusion of lay members on review committees provide an effective countervailing influence in favour of the interests of research subjects as lay members, like the remainder of the committee’s members, have no further involvement in the experiment after it has been approved as it is left to the researcher to report any important deviations from the approved protocol. (Sumner, 1987: 189) The initiator of a protocol is thus given a conflictual role as both experimenter and reporter and this article of faith in the researcher’s impartiality completes the structural bias in favour of his or her position.

IV. Beyond Littlewood: Looking at the Middle

Thus it should be apparent that there exists a real need for independent constraints on animal experimentation in terms of
legislation which bears significant similarities to the legal paradigm which regulates research on human subjects. The use of human research subjects is basically restricted to innocuous experimentation; this of course will probably never be a complete reality for animal research subjects who are chosen for highly invasive experimental procedures which are painful or lethal, and as such are considered morally impermissible to perform on live human research subjects. Nevertheless, ethicists are correct in arguing that the present paradigm governing the conduct of animal experimentation fails to strike any sort of judicious balance between the conflicting interests of experimental subjects and the beneficiaries of animal research.

In contrast, the stringent legal protection that human research subjects enjoy reflects both utilitarian and deontological principles. (Dresser, 1985: 1186) American federal law, for example, demands that the risks to human subjects be "reasonable in relation to anticipated benefits if any, to subjects, and the importance of knowledge that may reasonably be expected to result." (Dresser, 1985: 1186) Risks are to be minimized through good research design, and some forms of research are absolutely forbidden. In addition, research on human subjects is completely prohibited if the subject or his/her legal representative has not or is incapable of giving his/her informed consent. (Dresser, 1985: 1187)
Thus, the paradigm for research on human subjects does not treat knowledge as an absolute value; the direct pursuit of a research scientist's goal is weighed against its conformity to certain independent constraints, and this implies that even a significantly favourable balance of benefits over costs cannot justify an experiment if it radically compromises the well-being and integrity of human research subjects. This stands in dramatic contrast to the research that is conducted on animals, wherein the pursuit of vague, and highly abstract ends is said to sufficiently justify the infliction of intense levels of pain and deprivation upon animal research subjects.

It is obvious that a direct utilitarian approach is considered unsatisfactory for human research, and similarly a straightforward utilitarian strategy of costs and benefits is inadequate for the evaluation of animal research protocols for both theoretical reasons and pragmatic concerns related to the defects of the decision context. What is also needed is a set of fundamental rights which are defeasible, but strong enough to resist appeals to marginal, and highly speculative gains in aggregate welfare, or gains which are large, but dispensable in nature.

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The recognition of these fundamental rights would have a highly restrictive, yet salubrious effect upon the field of animal experimentation. These rights would ensure enough of a serious consideration of the interests of animal research subjects to preclude largely non-vital and painful research from being permitted. However, the principles which underly such a stringent restriction of animal research remain sensitive to utilitarian directives in the case of a clear and present, massively urgent need to address the seriously threatened vital interests of both human and non-human beneficiaries of animal research.

As part of this fully-integrated approach, American federal legislation would reflect specific utilitarian directives involving the minimization of pain, distress and loss of life through a review of experimental design and the definition of key terms such as pain, chronic pain and distress, which would otherwise be open to wide interpretation at the local level. These distinctions would then facilitate a meaningful categorization of research procedures based on the degree of harm, and the extent to which an animal research subject's

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7This already has been done in Sweden. See Rebecca Dresser, "Research on Animals: Values, Politics, and Regulatory Reform," Southern California Law Review, 48, 1985, 1195.
ethological preferences will be compromised; such systematization would facilitate a better understanding of the potential costs to animal research subjects. Furthermore, utilitarian considerations would require that legislation define what is an "adequate" use of analgesics, anaesthetics and tranquilizers and "appropriate" post-operative husbandry in addition to "humane" methods of killing animal research subjects. (Dresser, 1985: 1196)

As a minimum, deontological considerations suggest that certain research techniques be proscribed; this proposal is not as controversial as it may appear because there is a very strong relationship between the humaneness of experimental technique and the quality and validity of required data; in general, cruder techniques will increase the number of stress variables and undermine the validity of desired results.  

The central thrust of deontological directives to American federal legislation would ensure that the onus remains with the investigator "to demonstrate to the (review) committee the need for a particular number and species of animals and the infeasibility on nonanimal alternatives." (Dresser, 1985: 1195)

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This would significantly alter the dynamics of traditional review committees which are structurally biased in favour of the researcher; the particular import of this reform can be appreciated with respect to protocols that may involve the use of large numbers of animals and/or highly evolved species in which case federal legislation should demand that local committees rigourously scrutinize such proposals.

Perhaps one of the most radical, but most interesting of deontological directives is to extend the concept of guardianship to non-human animals. The prototype for research on humans incorporates this mechanism for those subjects such as children, and the mentally challenged, who are incapable of fulfilling the informed consent requirement. In respect to vivisection, the appointed guardian would determine whether the animals should be used as research subjects and/or the level of acceptable risk to which they will be exposed. Certainly, this has great appeal for those who demand an extremely radical restructuring of the animal research enterprise, but at present it is politically unattainable, though theoretically, one would be hard pressed to deny the applicability of the concept of guardianship to non-human animals given that they can be conceived of as moral subjects, who can be harmed in many of the same ways as moral agents.
An integrated deontological and utilitarian assessment of animal experimentation counsels the refinement of experimental technique and the elimination of painful, non-vital experimentation, in addition to the reduction and replacement of live animals with alternative non-sentient methods in areas of vital research. It has been suggested that the present patterns of vivisection are permitted as a result of the negligible legal standing of the non-human animal and because of certain ideological assumptions of the scientific and medical research's establishment, which together engender a laissez-faire approach to animal experimentation.

The authors of the Littlewood Report were to endorse this conduct of vivisection. Even though the Littlewood Committee acknowledged that animal pain was identical to human pain, the Committee did not care to condemn any research that was painful and non-vital in nature. Instead its members echoed the animal research establishment's ideological beliefs in the absolute value of knowledge; and if the reader recalls, the Committee to this effect stated that, "There should be no general barrier to the use of animal experimentation in seeking new biological knowledge, even if it cannot be shown to be of immediate or foreseeable value." (Quoted in Dewar, 1969: 56) Moreover, the authors of the Littlewood Report favoured not a decrease or eventual elimination of animal experimentation, but were
uncritical of a projected increase -- a position that commands very little support in today's slow, but changing consensus towards animal experimentation.
CHAPTER 5

SUMMARY AND CONCLUSION

The purpose of this essay has been to challenge the Littlewood Committee's defence of a laissez-faire approach to animal experimentation. This conduct of vivisection is grounded in an extreme objectification of the non-human animal and is perpetuated because of the non-human animal's negligible legal standing as chattel and by certain incoherent ideological commitments of the scientific and medical research establishment which maintain that science is 'value-free' and that knowledge is an absolute value, and these beliefs consequently prevent a fair consideration of the interests of animal research subjects.

It has been argued that a laissez-faire conduct of animal experimentation is ethically indefensible on grounds that animals are moral subjects in virtue of their capacity for sentience and autonomy through which they express an acute interest in their continued existence and an aversion to the frustration of their interests. This conception of non-human animals is at once rational and demonstrable in contrast to the negative, traditional objectification of animals as beasts and automata.

Though the moral significance of man's prereflective capacities
establishes that there can be no equality of interests between the human and the non-human animal, an animal's desire to live nevertheless precludes the compromise of its vital interests in other than exceptional cases in which the interests of the beneficiaries of animal research are mortally threatened and no alternatives to the animal model exist.

Furthermore, it was proposed that the rationalist tradition's exclusion of the non-human animal from the ambit of strict morality on grounds that animals cannot make claims nor conform their behaviour to the performance of duties is unsound. Adherents of rationalist school claim that only moral agents can have rights because they can make and defend their self-interested claims. But one of the embarrassing consequences of this tradition is that it also fails to adequately capture our moral obligations to nonrational humans, who like animals, are unable to make claims; and therefore according to the defenders of this view, children, the mentally retarded, the insane etc., cannot have rights. However, this is surely a grossly counterintuitive consequence and thus the rationalist school can neither provide us with any satisfactory reasons to exclude the non-human animal from the category of rights-holders.

Moreover, it was similarly argued that the will theory of rights cannot adequately explain our legal obligations to nonrational
humanity because its adherents insist that the element of will is the defining characteristic of all rights. A modified account of the interest-theory of rights was offered to underline the fact that the concept of a right embodies both an element of will and interest, and more importantly to suggest that the law can make a rational will operative by the appointment of guardians who can assert the person, property or legal rights on behalf of nonrational individuals who have legally identifiable interests.

Thus, the element of will does not always trump the element of interests as interests do form the determinative characteristic of certain basic rights such as the right not to be harmed and the right to life. On this basis, the plausibility of extending these basic rights to non-human animals can begin to be appreciated because animals also lack a rational will, but nevertheless possess a legitimate welfare, and thus like moral agents and human moral patients can be harmed or benefited by the frustration or fulfillment of the interests which are essential to their welfare.

Moreover, it has been suggested that an integrated approach to animal experimentation involving deontological and utilitarian principles is desperately needed and offers the best form of ethical evaluation of an experimental protocol. Deontological
considerations erect an essential threshold against both exploitative research and against the negative effects of local contingencies which a straightforward utilitarian cost-benefit calculation cannot effectively preclude when there is a possibility of an incremental gain in aggregate welfare.

However, utilitarian directives do draw our attention to the moral significance of the aggregate of a harm, in contrast to deontological considerations which underline the magnitude of a harm. It has been proposed that both these aspects are morally relevant to the assessment of animal research and that both directives would probably counsel the categorical abolition of research that is dispensable in nature.

In addition deontological and utilitarian considerations strongly suggest that some sort of principle of proportionality has to govern the infliction of harm on animal research subjects so that the greater the animal harm in terms of both aggregate numbers and magnitude, the more rigorous and persuasive must be its ethical justification and the probability of significant results.¹ In short, the onus must always remain with the investigator to prove the necessity of his/her research instead

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of a strong presumptive case to exist in the researcher’s favour. The overall reformist approach presented here does, in effect, resemble important elements of the paradigm which governs research on human subjects, and as such this constrained strategy represents a radical departure from a laissez-faire conduct of vivisection because it embodies a vision of animal experimentation as a moral science.
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