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Empty Cages: Animal Rights and Vivisection**

Animals are used in laboratories for three main purposes: education, product safety testing, and experimentation, medical research in particular. Unless otherwise indicated, my discussion is limited to their use in harmful, nontherapeutic medical research (which, for simplicity, I sometimes refer to as "vivisection"). Experimentation of this kind differs from therapeutic experimentation, where the intention is to benefit the subjects on whom the experiments are conducted. In harmful, nontherapeutic experimentation, by contrast, subjects are harmed, often seriously, or put at risk of serious harm, in the absence of any intended benefit for them; instead, the intention is to obtain information that might ultimately lead to benefits for others.

Human beings, not only nonhuman animals, have been used in harmful, nontherapeutic experimentation. In fact, the history of medical research contains numerous examples of human vivisection, and it is doubtful whether the ethics of animal vivisection can be fully appreciated apart from the ethics of human vivisection. Unless otherwise indicated, however, the current discussion of vivisection – and my use of the term – is limited to harmful, nontherapeutic experimentation using nonhuman animals.

I. The Benefits Argument

There is only one serious moral defense of vivisection.[1] That defense proceeds as follows. Human beings are better off because of vivisection. Indeed, we are (we are told) much better off because of it. If not all, at least most of the most important improvements in human health and longevity are indebted to vivisection. Included among the advances often cited are open heart surgery, vaccines (for polio and small pox, for example), cataract

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and hip replacement surgery, and advances in rehabilitation techniques for victims of spinal cord injuries and strokes. Without these and the many other advances attributable to vivisection, proponents of the Benefits Argument maintain, the incidence of human disease, permanent disability, and premature death would be far greater than it is today.[2]

Defenders of the Benefits Argument are not indifferent to how animals are treated. They agree that animals used in vivisection sometimes suffer, both during the research itself and because of the restrictive conditions of their life in the laboratory. That the research can harm animals, no reasonable person will deny. Experimental procedures include drowning, suffocating, starving, and burning; blinding animals and destroying their hearing; damaging their brains, severing their limbs, crushing their organs; inducing heart attacks, ulcers, paralysis, seizures; forcing them to inhale tobacco smoke, drink alcohol, and ingest various drugs, such as heroine and cocaine.[3]

These harms are regrettable, vivisection's defenders acknowledge, and everything that can be done should be done to minimize animal suffering. For example, to lessen the stress caused by overcrowding, animals should be housed in larger cages. But (so the argument goes) there is no other way to secure the important human health benefits vivisection yields so abundantly, benefits that greatly exceed any harms animals endure.

II. What the Benefits Argument Omits

Any argument that rests on comparing benefits and harms must not only state the benefits accurately; it must also do the same for the relevant harms. Advocates of the Benefits Argument fail on both counts. Independent of their lamentable tendency to minimize the harms done to animals and their fixed resolve to marginalize non animal alternatives[4], advocates overestimate the human benefits attributable to vivisection and conveniently ignore the massive human harms that are an essential part of vivisection's legacy. Even more fundamentally, they uniformly fail to provide an intelligible methodology for comparing benefits and harms across species. I address each of these three failures in turn.

The overestimation of human benefits: Proponents of the Benefits Argument would have us believe that most of the truly important improvements in human health could not have been achieved without vivisection. The facts tell a different story. Public health scholars have shown that animal experimentation has made at best only a modest contribution to public health. As a matter of fact, the vast majority of the most important health advances have resulted from improvements in living conditions (in

sanitation, for example) and changes in personal hygiene and lifestyle, none of which has anything to do with animal experimentation.[5]

The underestimation of human harms: Advocates of the Benefits Argument conveniently ignore the hundreds of millions of deaths and the uncounted illnesses and disabilities that are attributable to reliance on the "animal model" in research. Sometimes the harms result from what reliance on vivisection makes available; sometime they result from what reliance on vivisection prevents. The deleterious effects of prescription medicines are an example of the former.

Prescription drugs are first tested extensively on animals before being made available to consumers. As is well known, there are problems involved in extrapolating results obtained from studies on animal beings to human beings. In particular, many medicines that are not toxic for test animals prove to be highly toxic for human beings. How toxic? It is estimated that one hundred thousand Americans die and some two million are hospitalized annually because of the harmful effects of the prescription drugs they are taking.[6] That makes prescription drugs the fourth leading cause of death in America, behind only heart disease, cancer, and stroke, a fact that, without exception, goes unmentioned by the Benefits Argument's advocates.

Worse, the Food and Drug Administration, the federal agency charged with regulating prescription drugs, estimates that physicians report only one percent of adverse drug reactions. In other words, for every adverse drug response reported, ninety-nine are not. Clearly, before vivisection's defenders can reasonably claim that human benefits greatly exceed human harms, they need honestly to acknowledge how often and how much reliance on this model leads to prescribed therapies that cause massive human harm.[7]

Massive harm to humans also is attributable to what reliance on vivisection prevents. The role of cigarette smoking in the incidence of cancer is a case in point. As early as the 1950s, human epidemiological studies revealed a causal link between cigarette smoking and lung cancer. Nevertheless, repeated efforts, made over more than 50 years, rarely succeeded in inducing tobacco related cancers in animals. Despite the alarm sounded by public health advocates, governments around the world for decades refused to mount an educational campaign to inform smokers about the grave risks they were running. The Center for Disease Control states that "[t]he adverse health effects from cigarette smoking account for an estimated 443,000 deaths, or nearly one of every five deaths, each year in the United States", adding that "more deaths are caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV),

illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined".[8]

How much of this massive human harm could have been prevented if the results of vivisection had not (mis)directed government health care policy? It is not clear that anyone knows the answer beyond saying, "A great deal. More than we will ever know". One thing we do know, however: advocates of the Benefits Argument contravene the logic of their argument when they fail to include these harms in their defense of vivisection.

Comparisons across species: Not to go unmentioned, finally, is the universal failure of vivisection's defenders to explain how we are to weigh benefits and harms across species. Before we can judge that vivisection's benefits for humans greatly exceed vivisection's harms to other animals, someone needs to explain how the relevant comparisons should be made. How much animal pain equals how much human relief from a drug that was tested on animals, for example? It does not suffice to say, to quote the American philosopher Carl Cohen, that "the suffering of our species does seem somehow to be more important than the suffering of other species".[9] Not only does this fail to explain how much more important our suffering is supposed to be, it offers no reason why anyone should think that it is. (Cohen's views are discussed at greater length in the discussion of speciesism, below).

Plainly, unless – or until – those who support the Benefits Argument offer an intelligible methodology for comparing benefits and harms across species, the claim that human benefits derived from vivisection greatly exceed the harms done to animals is more in the nature of unsupported ideology than demonstrated fact.

III. Human Vivisection and Human Rights

The Benefits Argument suffers from an even more fundamental defect. Despite appearances to the contrary, the argument begs all the most important moral questions; in particular, it fails to address the role that moral rights play in assessing harmful, nontherapeutic research on animals. The best way to understand its failure in this regard is to position the argument against the backdrop of human vivisection and human rights.

Human beings have been used in harmful, nontherapeutic experiments for thousands of years.[10] Not surprisingly, most human "guinea pigs" have not come from the wealthy and educated, not from the dominant race, not from those with the power to assert and enforce their rights. No, most of human vivisection's victims have been coercively conscripted from the ranks of young children (especially orphans), the elderly, the severely

developmentally disabled, the insane, the poor, the illiterate, members of "inferior" races, homosexuals, military personnel, prisoners of war, and convicted criminals, for example. One such case will be considered below.

The scientific rationale behind vivisecting human beings needs little explanation. Using human subjects in research overcomes the difficulty of extrapolating results from another species to our species. If "benefits for humans" establishes the morality of animal vivisection, should we favor human vivisection instead? After all, vivisection that uses members of our own species promises even greater benefits.

No serious advocate of human rights (and I count myself among this number) can support such research. This judgment is not capricious or arbitrary; it is a necessary consequence of the logic of basic moral rights, including our rights to bodily integrity and to life. This logic has two key components.[11]

First, possession of these rights confers a unique moral status. Those who possess these rights have a kind of protective moral shield, an invisible "No Trespassing" sign, so to speak, that prohibits others from injuring their bodies, taking their life, or putting them at risk of serious harm, including death.[12] When people violate our rights, when they "trespass on our moral property", they do something wrong to us directly.

This does not mean that it must be wrong to hurt someone or even to take their life. When terrorists exceed their rights by violating ours, we act within our rights if we respond in ways that can cause serious harm to the violators. Still, what we are free to do when someone violates our rights does not translate into the freedom to override their rights without justifiable cause.

Second, the obligation to respect others' rights to bodily integrity and to life trumps any obligation we have to benefit others.[13] Even if society in general would benefit if the rights of a few people were violated, that would not make violating their rights morally acceptable to any serious defender of human rights. The rights of the individual are not to be sacrificed in the name of promoting the general welfare. This is what it means to affirm our rights. It is also why the basic moral rights we possess, as the individuals we are, have the great moral importance they do.

IV. Why the Benefits Argument Begs the Question

Once we understand why, given the logic of moral rights, respect for the rights of individuals takes priority over any obligation we might have to benefit others, we can understand why the Benefits Argument fails to justify vivisection on nonhuman animals. Clearly, all that the Benefits Argument

can show is that vivisection on nonhuman animals benefits human beings. What this argument *cannot* show is that vivisecting animals for this purpose is morally justified. And it cannot show this because the benefits humans derive from vivisection are irrelevant to the question of animal rights. We cannot show that animals have no right to life, for example, because we benefit from using them in research in which they are killed.

It will not suffice (and this for two reasons) for advocates of the Benefits Argument to insist that "there are no alternatives" to vivisection that will yield as many human benefits. First, this reply is more than a little disingenuous. The greatest impediment to developing new scientifically valid non animal alternatives, and to using those that already exist, is the hold that the ideology of vivisection currently has on medical researchers and those who fund them. Second, whether animals have rights is not a question that can be answered by saying how much vivisection benefits human beings. No matter how great the human benefits might be, the practice is morally wrong if animals have rights that vivisection violates.

But *do* animals have any rights? The best way to answer this question is to begin with an actual case of human vivisection.[14]

V. The Children of Willowbrook

Now closed, Willowbrook State Hospital was a mental hospital located in Staten Island, one of New York City's five boroughs. For fifteen years, from 1956 to 1971, under the leadership of New York University Professor Saul Krugman, hospital staff conducted a series of viral hepatitis experiments on thousands of the hospital's severely retarded children, some as young as three years old. Among the research questions asked: Could injections of gamma globulin (a complex protein extracted from blood serum) produce long term immunity to the hepatitis virus?

What better way to find the answer, Dr. Krugman decided, than to separate the children in one of his experiments into two groups. In the one, children were fed the live hepatitis virus and given an injection of gamma globulin, which Dr. Krugman believed would produce immunity; in the other, children were fed the virus but received no injection. In both cases, the virus was obtained from the feces of other Willowbrook children who suffered from the disease. Parents or guardians were asked to sign a release form that would permit their children to be "given the benefit of this new preventive".

The results of the experiment were instrumental in leading Dr. Krugman to conclude that hepatitis is not a single disease transmitted by a single virus; there are, he confirmed, at least two distinct viruses that

transmit the disease, what today we know as hepatitis A and hepatitis B, the latter of which is the more severe of the two. Early symptoms include fatigue, loss of appetite, malaise, abdominal pain, vomiting, headache, and intermittent fever; then the patient becomes jaundiced, the urine darkens, the liver swells, and enzymes normally stored in the liver enter the blood. Death results in 1 to 10 percent of cases.

Everyone agrees that many people have benefited from this knowledge and the therapies Dr. Krugman's research made possible. Some question the necessity of his research, citing the comparable findings that Baruch Blumberg made by analyzing blood antigens in his laboratory, where no children were harmed or put at risk of grievous harm. But even if we assume that Dr. Krugman's results could not have been achieved without experimenting on his uncomprehending subjects, what he did was wrong.

The purpose of his research, after all, was not to benefit each of the children. If that was his objective, he would not have withheld injections of gamma globulin from half of them. *Those* children certainly could not be counted among the intended beneficiaries. (Thus the misleading nature of the release form: not *all* the children were "given the benefit of this new preventive").

Moreover, it is a perverse moral logic that says, "The children who received the injections of gamma globulin but who did not contract hepatitis – they were the real beneficiaries". Granted, if these children already had the hepatitis virus and failed to develop the disease because of the injections, it would make sense to say that they benefited from Dr. Krugman's experiment. But these children did not already have the virus; they were given the virus by Dr. Krugman and his associates. How can they be described as "beneficiaries"? If I hide a time bomb under your bed, armed with an experimental device that I think will defuse the bomb before it is set to go off, and if the device works, I do not think you would shake my hand and thank me because you benefited from my experiment. I think you would (if you could) wring my neck for placing you in grave danger. Would that the children of Willowbrook could have done the same to Dr. Krugman and his associates.

No serious advocate of human rights can accept the moral propriety of Dr. Krugman's actions. By intentionally infecting all the children in his experiment, he put each of them at risk of serious harm. And by withholding the suspected means of preventing the disease from half the children, he violated their rights twice over: first, by willfully placing them at risk of serious physical illness; second, by risking their very life. This grievous breach of ethics finds no justification in the benefits others derived. To

violate the moral rights of the few is never justified by adding the benefits for the many.

VI. The Basis of Human Rights

Those who deny that animals have rights frequently emphasize the uniqueness of human beings. We not only write poetry and compose symphonies, read history and solve math problems; we also understand our own mortality and make moral choices. Other animals do none of these things. That is why we have rights and they do not.

This way of thinking overlooks the fact that many human beings do not read history or solve math problems, do not understand their own mortality or make moral choices. The profoundly retarded children Dr. Krugman used in his research are a case in point. If possession of the moral rights to bodily integrity and life depended on understanding one's mortality or making moral choices, for example, then those children lacked these rights. In their case, therefore, there would be no protective moral shield, no invisible "No Trespassing" sign that limited what others were free to do to them. Lacking the protection rights afford, *there would not have been anything about the moral status of the children themselves* that prohibited Dr. Krugman from injuring their bodies, taking their life, or putting them at risk of serious harm. Lacking the protection rights afford, Dr. Krugman did not – indeed, he could not have done – anything wrong to the children. Again, this is not a position any serious advocate of human rights can accept.

But what is there about those of us reading these words, on the one hand, and the children of Willowbrook, on the other, that can help us understand how they can have the same rights we claim for ourselves? Where will we find the basis of our moral equality? Not in the ability to write poetry, make moral choices, and the like. Not in human biology, including facts about the genetic make-up humans share. All humans are (in some sense) biologically the same. However, biological facts are indifferent to moral truths. Who has what genes has no moral relevance to who has what rights. Whatever else is in doubt, this we know.

But if not in some advanced cognitive capacity or genetic similarity, then where might we find the basis of our equality? Any plausible answer must begin with the obvious: The differences between the children of Willowbrook and those who read these words are many and varied. We do not denigrate these children when we say that our life has a richness that theirs lacked. Few among us would trade our life for theirs, even if we could.

Still, as important as these differences are, they should not obscure the

similarities. For, like us, these children were the *subjects-of-a-life*, *their* life, a life that was experientially better or worse for the child whose life it was. Like us, each child was a unique somebody, not a replaceable something. True, they lacked the ability to read and to make moral choices, for example. Nevertheless, what was done to these children, both what they experienced and what they were deprived of, mattered to them, as the individuals they were, just as surely as what is done to us, when we are harmed, matters to us.

In this respect, as the subjects-of-a-life, we and the children of Willowbrook are the same, are equal. Only in this case, our sameness, our equality is important morally. Logically, we cannot claim that harms done to us matter morally, but that harms done to these children do not. Relevantly similar cases must be judged similarly. This is among the first principles of rational thought, a principle that has immediate application here. Logically, we cannot claim our rights to bodily integrity and to life, then deny these same rights in the case of the children. Without a doubt, the children of Willowbrook had rights, if we do.

VII. Why Animals Have Rights

We routinely divide the world into animals, vegetables, minerals. Amoebae and paramecia are not vegetables or minerals; they are animals. No one engaged in the vivisection debate thinks that the use of such simple animals poses a vexing moral question. By contrast, everyone engaged in the debate recognizes that using nonhuman primates must be assessed morally. All parties to the debate, therefore, must "draw a line" somewhere between the simplest forms of animate life and the most complex, a line that marks the boundary between those animals that do, and those that do not, clearly matter morally.

One way to avoid some of the controversies in this quarter is to follow Charles Darwin's lead. When he compares (these are his words) "the Mental Powers of Man and the Lower Animals", Darwin restricts his explicit comparisons to humans and other mammals.[15]

His reasons for doing so depend in part on structural considerations. In all essential respects, these animals are physiologically like us, and we, like them. Now, in our case, an intact, functioning central nervous system is associated with our capacity for subjective experience. For example, injuries to our brain or spinal cord can diminish our sense of sight or touch, or impair our ability to feel pain or remember. By analogy, Darwin thinks it is reasonable to infer that the same is true of animals who are most physiologically similar to us. Because our central nervous system provides the physical basis for our subjective awareness of the world, and

because the central nervous system of other mammals resembles ours in all the relevant respects, it is reasonable to believe that their central nervous system provides the physical basis for their subjective awareness.

Of course, if attributing subjective awareness to nonhuman mammals clashed with common sense, made their behavior inexplicable, or was at odds with our best science, Darwin's position would need to be abandoned. But just the opposite is true. Every person of common sense agrees with Darwin. All of us understand that dogs and pigs, cats and chimps enjoy some things and find others painful. Not surprisingly, they act accordingly, seeking to find the former and avoid the latter. In addition, both humans and other mammals share a family of cognitive abilities (we both are able to learn from experience, remember the past, anticipate the future) as well as a variety of emotions (Darwin lists fear, jealousy, and sadness). Not surprisingly, again, these mental capacities play a role in how they behave. For example, other mammals will behave one way rather than another because they remember which ways of acting had pleasant outcomes in the past, or because they are afraid or sad.

Moreover, that these animals are subjectively present in the world, Darwin understands, is required by evolutionary theory.[16] The mental complexity we find in humans did not arise from nothing. It is the culmination of a long evolutionary process. We should not be surprised, therefore, when Darwin summarizes his general outlook in these terms: "The differences between the mental faculties of humans and the higher animals, great as it is, is one of degree and not of kind."[17]

The psychological complexity of mammals (henceforth "animals", unless otherwise indicated) plays an important role in arguing for their rights. As in our case, so in theirs: they are the subjects-of-a-life, *their* life, a life that is experientially better or worse for the one whose life it is. Each is a unique somebody, not a replaceable something. True (like the children of Willowbrook), they lack the ability to read, write, or make moral choices. Nevertheless, what is done to animals, both what they experience and what they are deprived of, matters to them, as the individuals they are, just as what was done to the children of Willowbrook, when they were harmed, mattered to them.

In this respect, as the subjects-of-a-life, other mammals are our equals. And in this case, our sameness, our equality, is important morally. Logically, we cannot maintain that harms done to us matter morally, but that harms done to these animals do not. Relevantly similar cases must be judged similarly. As was noted earlier, this is among the first principles of rational thought, and one that again has immediate application here. Logically, we

cannot claim our rights to bodily integrity and life, or claim these same rights for the children of Willowbrook, then deny them when it comes to other mammals. Without a doubt, these animals have rights, if humans do.

VIII. Challenging Human and Animal Equality: Speciesism

The argument for animal rights sketched in the preceding implies that humans and other animals are equal in morally relevant respects. Some philosophers (Carl Cohen principal among them) repudiate any form of species egalitarianism. According to Cohen, whereas humans are equal in morally relevant respects, regardless of our race, gender or ethnicity, humans and other animals are not morally equal in any respect, not even when it comes to suffering. Here are a few examples that will clarify his position.

First, imagine a boy and a girl suffer equally. If someone assigns greater moral weight to the boy's suffering because he is a white male from Ireland, and less moral weight to the girl's suffering because she is a black female from Kenya, Cohen would protest – and rightly so. Human racial, gender and ethnic differences are not morally relevant differences. The situation differs, however, when it comes to differences in species. Imagine that a cat and dog both suffer as much as the boy and girl. For Cohen, there is nothing morally prejudicial, nothing morally arbitrary in assigning greater importance to the suffering of the children, because they are human, than to the equal suffering of the animals, because they are not.

Proponents of animal rights deny this. We believe that views like Cohen's reflect a moral prejudice against animals that is fully analogous to moral prejudices, like sexism and racism, that humans often have against one another. We call this prejudice speciesism.[18]

For his part, Cohen affirms speciesism (human suffering does "somehow" count for more than the equal suffering of animal suffering), but denies its prejudicial status. Why? Because (he thinks) while there are no morally relevant differences between human men and women, or between whites and blacks, "the morally relevant differences [between humans and other animals] are enormous".[19] In particular, human beings but not other animals are "morally autonomous"; we can, but they cannot, make moral choices for which we are morally responsible.

This defense of speciesism is no defense at all. Not only does it conveniently overlook the fact that a very large percentage of the human population (children up through many years of their life, for example) is not morally autonomous; moral autonomy is not relevant to the issues at hand. An example will help explain why.

Imagine someone says that Jack is smarter than Jill because Jack lives in Syracuse, Jill in San Francisco. Where the two live is different, certainly; and where different people live sometimes is a relevant consideration (for example, when a census is being taken or taxes are levied). But everyone will recognize that where Jack and Jill live has no logical bearing on whether Jack is smarter. To think otherwise is to commit a fallacy of irrelevance familiar to anyone who has taken a course in elementary logic.

The same is no less true when a speciesist says that Toto's suffering counts for less than the equal suffering of Dorothy because Dorothy, but not Toto, is morally autonomous. If the question we are being asked is whether Jack is smarter than Jill, we are given no relevant reason for thinking one way or the other if we are told that Jack and Jill live in different cities. Similarly, if the question we are being asked is, "Does Toto's pain count as much as Dorothy's?", we are given no relevant reason for thinking one way or the other if we are told that Dorothy is morally autonomous, and Toto not.

This is not because the capacity for moral autonomy is never relevant to our moral thinking about humans and other animals. Sometimes it is. If Jack and Jill have this capacity, then they (but not Toto) will have an interest in being free to act as their conscience dictates. In this sense, the difference between Jack and Jill, on the one hand, and Toto, on the other, *is* morally relevant. But just because moral autonomy is morally relevant to the moral assessment of *some* cases, it does not follow that it is relevant in *all* cases. And one case in which it is not relevant is the moral assessment of pain. Logically, to discount Toto's pain because Toto is not morally autonomous is fully analogous to discounting Jill's intelligence because she does not live in Syracuse.

The question, then, is whether any defensible, relevant reason can be offered in support of the speciesist judgment that the moral importance of human and animal pain, equal in other respects, always should be weighted in favor of the human being over the animal being? To this question, neither Cohen nor any other philosopher, to my knowledge, offers a logically relevant answer. To persist in judging human pains (I note that the same applies to equal pleasures, benefits, harms, and so on, throughout all similar cases) as being more important than the like pains of other animals, because they are human pains, is not rationally defensible. Speciesism is a moral prejudice. Contrary to Cohen's assurances to the contrary, it is wrong, not right.

IX. Other Objections, Other Replies

Not everyone who denies rights to animals is a speciesist. Some critics agree that human and nonhuman animals are equal in some morally

relevant respects; for example, if a man and a mouse suffer equally, then their suffering should count the same, when judged morally. These critics simply draw the line when it comes to moral rights. Humans have them, other animal do not. Why this difference? The answers are many. Here, briefly, is a summary statement of some of the most common objections to animal rights together with my replies.[20] It is to be recalled that the rights in question are the moral rights to bodily integrity and life.

1. Objection: Animals do not understand what rights are. Therefore, they have no rights.
Reply: The children of Willowbrook, all young children for that matter, do not understand what rights are. Yet we do not deny rights in their case, for this reason. To be consistent, we cannot deny rights for animals, for this reason.
2. Objection: Animals do not respect our rights. For example, lions sometimes kill innocent people. Therefore, they have no rights.
Reply: Children sometimes kill innocent people. Yet we do not deny rights in their case, for this reason. To be consistent, we cannot deny rights for animals, for this reason.
3. Objection: Animals do not respect the rights of other animals. For example, lions kill wildebeests. Therefore, they have no rights.
Reply: Children do not always respect the rights of other children; sometimes they kill them. Yet we do not deny rights in their case, for this reason. To be consistent, we cannot deny rights for animals, for this reason.
4. Objection: If animals have rights, they should be allowed to vote, marry, file for divorce, and immigrate, for example, which is absurd. Therefore, animals have no rights.
Reply: Yes, permitting animals to do these things is absurd. But these absurdities do not follow from claiming rights to life and bodily integrity, either in the case of animals or in that of the children of Willowbrook.
5. Objection: If animals have rights, then mosquitoes and roaches have rights, which is absurd. Therefore, animals have no rights.
Reply: Not all forms of animate life must have rights because some animals do. In particular, neither mosquitoes nor roaches have the kind of physiological complexity associated with being

a subject-of-a-life. In their case, therefore, we have no good reason to believe that they have rights, even while we have abundantly good reason to believe that other animals (mammals in particular) do.

6. Objection: If animals have rights, then so do plants, which is absurd. Therefore, animals have no rights.

Reply: "Plant rights" do not follow from animal rights. We have no reason to believe, and abundant reason to deny, that carrots and cabbages are subjects-of-a-life. We have abundantly good reason to believe, and no good reason to deny, that mammals are. In claiming rights for animals, therefore, we are not committed to claiming rights for plants.

7. Objection: Human beings are closer to us than animals; we have special relations to them. Therefore, animals have no rights.

Reply: Yes, we have relations to humans that we do not have to other animals. However, we also have special relations to our family and friends that we do not have to other human beings. But we do not conclude that other humans have no rights, for this reason. To be consistent, we cannot deny rights for animals, for this reason.

8. Objection: Only human beings live in a moral community in which rights are understood. Therefore, all human beings, and only human beings, have rights. [21]

Reply: Yes, at least among terrestrial forms of life, only human beings live in such a moral community. But it does not follow that only human beings have rights. Only human beings live in a scientific community in which genes are understood. From this we do not conclude that only human beings have genes. Neither should we conclude, using analogous reasoning, that only human beings have rights.

9. Objection: Humans have rights, and animals do not, because God gave rights to us but withheld rights from them.

Reply: No passage in any sacred book states, "I (God) give rights to humans. And I (God) withhold them from animals". We simply do not find such declarations in the Old Testament, the New Testament, the Torah, or the Koran, for example.[22]

10. Objection: Animals have some rights to bodily integrity and life, but the rights they have are not equal to human rights. Therefore, human vivisection is wrong, but animal vivisection

is not.

Reply: This objection begs the question; it does not answer it. What morally relevant reason is there for thinking that humans have greater rights than animals? Certainly it cannot be any of the reasons examined in 1-9. But if not in any of them, then where? The objection does not say.

The objections just reviewed have been considered because they are among the most important, not because they are the least convincing. Their failure, individually and collectively, goes some way towards suggesting the logical inadequacy of the anti-animal rights position. Morality is not mathematics certainly. In morality, there are no proofs like those we find in geometry. What we can find, and what we must live with, are principles and values that have the best reasons, the best arguments on their side. The principles and values that pass this test, whether most people accept them or not, are the ones that should guide our lives. Given this reasonable standard, the principles and values of animal rights should guide our lives.

X. Conclusion

As was noted at the outset, animals are used in laboratories for three main purposes: education, product safety testing, and experimentation, harmful nontherapeutic experimentation in particular. Of the three, the latter has been the object of special consideration. However, the implications for the remaining purposes should be obvious.[23] Any time any animals' rights are violated in pursuit of benefits for others, what is done is wrong. It is conceivable that some uses of animals for educational purposes (for example, having students observe the behavior of injured animals when they are returned to their natural habitat) might be justified. By contrast, it is not conceivable that using animals in product testing can be. Harming animals to establish what brands of cosmetics or combinations of chemicals are safe for humans is an exercise in power, not morality. In the moral universe, animals are not our tasters, we are not their kings.

The implications of animal rights for vivisection are both clear and uncompromising. Vivisection is morally wrong. It should never have begun and, like all great speciesist evils, it ought to end, the sooner, the better. To reply (again) that "there are no alternatives" not only misses the point, it is false. It misses the point because it assumes that the benefits humans derive from vivisection are derived morally when they are not. And it is false because, apart from using already existing and developing new non animal research techniques, there is another, more fundamental alternative

to vivisection. This is to stop doing it. When all is said and done, the only adequate moral response to vivisection is empty cages, not larger cages.

Notes

1. One could attempt to justify animal vivisection by arguing that it is interesting, challenging, and yields knowledge, which is intrinsically good even when it is not useful. However, a defender of human vivisection could make the same claims, and no one (one hopes) would think that this settles any moral question in that case. Logically, there is no reason to judge animal vivisection any differently. Even if it is interesting and challenging, and even if it yields knowledge (which is intrinsically good), that would not make it right.
2. For representative statements of the Benefits Argument, consult the web sites of Americans for Medical Progress (www.ampfeg.org) and the National Association for Biomedical Research (www.nabr.org).
3. For a classic inventory of varieties of vivisection, see Jeff Diner, *Behind the Laboratory Door* (Washington, DC: Animal Welfare Institute, 1985).
4. The philosopher Carl Cohen, the most strident defender of the Benefits Argument, is guilty on both counts. The most he will admit is that "some" animals "sometimes" are caused "some pain"; as for alternatives, he dismisses their validity as "specious". See his contribution (and my rejoinder) in Carl Cohen and Tom Regan, *The Animal Rights Debate* (Lanham, MD: Rowman & Littlefield, 2001). I discuss his ideas more pointedly in the sequel.
5. For a summary of the relevant literature, see Hugh Lafollette and Niall Shanks, *Brute Science: Dilemmas of Animal Experimentation* (London: Routledge, 1996). In addition, see C. Ray Greek, MD and Jean Swingle Greek, DVM, *Sacred Cows and Golden Geese: The Human Costs of Experiments on Animals* (New York: Continuum, 2000), and *Specious Science: How Genetics and Evolution Reveal Why Medical Research on Animals Harms Humans* (New York: Continuum, 2002).
6. The statistics concerning the toxicity of FDA approved drugs will be found in U. S. General Accounting Office, *Report to the Chairman, Subcommittee on Human Resources and Intergovernmental Relations Committee on Government Operations, House of Representatives, FDA Drug Review, Postapproval Risk,1976-1985* (Washington, D.C.: U. S. Government Printing Office, 1990).
7. The estimate of 1 percent of adverse drug reactions that are reported is given in D. A. Kessler, "Introducing MedWatch: A New Approach to Reporting Medication and Adverse Effects and Product Problems", *Journal of the American Medical Association* 269 (1993): 2765-68.
8. See http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm.
9. *The Animal Rights Debate*, 291.
10. Representative studies of human vivisection include *The Nazi Doctors and the Nuremberg Code: Human Rights in Human Experimentation*, edited by George J. Annas and Michael A. Grodin (New York: Oxford University Press, 1992), chapters. 1-7, 11; Allen M. Homblum, *Acres of Skin* (London: Routledge, 1999); James Jones, *Bad Blood: The Tuskegee Syphilis Experiment* (New York: Free Press, 1993); Coral Lansbury, *The Old Brown Dog: Women, Workers, and Vivisection in Edwardian England* (Madison: The University of Wisconsin Press, 1985), chapters 1-4; Susan E. Lederer, *Subjected to Science:*

Human Experimentation in America before the Second World War (Baltimore: The Johns Hopkins University Press, 1995), chapters 2, 4-5.

11. More complete explanations of my analysis of rights will be found in *The Case for Animal Rights* (Berkeley: University of California Press, 1983), and *Animal Rights, Human Wrongs: An Introduction to Moral Philosophy* (Lanham, MD: Rowman and Littlefield, 2004).
12. The analogy of rights with "No Trespassing" signs I owe to Robert Nozick, *Anarchy, State and Utopia* (New York: Basic Books, 1974).
13. The analogy of rights with "trump" I owe to Ronald Dworkin, *Taking Rights Seriously* (Cambridge, Mass: Harvard University Press, 1977).
14. The best general account of the research conducted on the children of Willowbrook is David and Shelia Rothman, *The Willowbrook Wars* (New York: Harper & Row, 1984).
15. For Darwin's views, see his "Comparison of the Mental Powers of Man and the Lower Animals", in *Animal Rights and Human Obligations*, edited by Tom Regan and Peter Singer, 72-81 (Englewood Cliffs, NJ: Prentice Hall, 1976).
16. Many people of good will do not believe in evolution. They believe that human existence is the result of a special creation by God, something that took place approximately 10,000 years ago. For these people, the evidence for animal minds provided by evolutionary theory is no evidence at all. Despite first impressions, the rejection of evolution need not undermine the main conclusions summarized in the previous paragraph. All of the world's religions speak with one voice when it comes to the question before us. Read the Bible, the Torah, and the Koran. Study Confucianism, Buddhism, Hinduism, or Native American spiritual writings. The message is everywhere the same. Mammals *most certainly* are psychologically present in the world. These animals *most certainly* have both preference and welfare interests. In these respects, all the world's religions teach the same thing. Thus, while the argument I have given appeals to the implications of evolutionary theory, the conclusions I reach are entirely consistent with the religiously based convictions of people who do not believe in evolution. And for those who believe both in God and in evolution? Well, these people have reasons of both kinds for recognizing the minds of other the animals with whom we share a common habitat: the Earth.
17. Darwin, op. cit., 80. Elsewhere I argue that this same argument can be extended to birds. In addition, I argue that fish and other vertebrates should be given the benefit of the doubt. See *Animal Rights, Human Wrongs*, chapter 4. Because of space constraints, I limit my argument here to mammals only.
18. The term *speciesism* was coined by Richard Ryder. See his *Victims of Science: The Use of Animals in Science* (London: David-Poynter, 1975).
19. *The Animal Rights Debate*, 62.
20. I address a number of more philosophical objections in "The Case for Animal Rights: A Decade's Passing", in my *Defending Animal Rights*, 39-65 (Champaign: University of Illinois Press, 2001).
21. Cohen favors this argument. See "Do Animals Have Rights?", *Ethics and Behavior* 7 (1997): 94-95. I reply more fully in *The Animal Rights Debate*, 281-284.
22. For fuller discussions of religious convictions and animal rights, see *Animal Rights, Human Wrongs*, chapter 8, and my "Christians Are What Christians Eat", in *The Thee Generation: Reflections on the Coming Revolution* (Philadelphia: Temple University Press, 1991), 143-158.
23. I explore the use of animals in education and product testing in *Empty Cages: Facing the Challenge of Animal Rights* (Lanham, MD: Rowman and Littlefield, 2004), chapter 10.