RELIGIOUS ELEMENTS IN THE BACKGROUND OF THE BRITISH ANTI-VIVISECTION MOVEMENT[†]

INTRODUCTION

In reading the literature of English physiology I have been struck by the continual recurrence of the word, "sacrifice." When a French or German physiologist has destroyed an animal, he says simply that he has killed it, whereas his English or American counterpart almost always says that he has "sacrificed" the animal. No doubt it will be objected that this is a mere convention, one beginning at last to be abandoned. But what lies behind the convention?

In the same way I have been impressed, while delving into the tremendous literary output of the British anti-vivisection movement, by the constant and habitual use of the words, "crucify" and "crucifixion." In writing of this sort, an animal is seldom said to have been tied or secured to an operating table : almost always it is described as having been "crucified," often, of course, with the gratuitous specification that its extremities have been nailed in place.

If other evidence of the same tendency was not as plentiful as it is, I think this choice of words would be enough in itself to draw attention to the religious feeling—religious certainly in origin—which in Great Britain has permeated the whole issue of animal experimentation. This feeling has been exhibited by both sides in the controversy; indeed, with reference to the nineteenth century, it is hardly permissible to speak about "sides" at all, except in the most general way; for between the extremes of conviction, demanding total abolition of animal experiments on the one hand and absolute non-intervention on the other, almost every shade of opinion about what might or ought to be permitted was represented by both physicians and clergymen, by both scientists and laymen. There were occasions when science needed defending not only for, but against, its own practitioners. No one, I think, can fail to be struck by the ambivalent attitude of many physicians and physiologists to this question, even after the introduction of

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[†]Twentieth Beaumont Lecture, Carmalt Foundation, read before the Beaumont Medical Club of Connecticut, in the Historical Library, Yale University School of Medicine, 6 May 1955.

anesthesia. Sir Charles Bell died a few years before anesthetics became available, but Lawson Tait and Sir William Ferguson, who flourished toward the end of the century, shared in varying measure Bell's antivivisectionist views.

The place of the brute in man's world was not the essential question: of greater importance was the place of the brute in God's universe. Men of earnest religious conviction viewed this question, as they viewed all that concerned their age, *sub specie aeternitatis*. To illustrate this general point, and to stand as epigraphs for much of what I shall have to say later, I submit to your notice three quotations, all by famous physicians. The first, from an introductory physiological lecture delivered at Guy's Hospital, 5 October 1825, is by James Blundell, well remembered for his work on blood transfusion, which included experiments on dogs.¹

They who object [said Blundell] to the putting of animals to death for this purpose do not reflect that the death of an animal is a very different thing from that of a man. To an animal, death is an eternal sleep; to man, it is the commencement of a new and untried state of existence... When animals are sacrificed on the altar of science that Nature may reveal her secrets, the means are consecrated by the end for which alone experiments are instituted by the votaries of knowledge and the friends of the human race. Here, then, we take our stand; and we defy the puny drivellers of the press—the declamatory and spurious orators of the day—to drive us from it. We defend the sacrifice of animals in so far as it is calculated to contribute to the improvement of science; and in those parts of physiological science immediately applicable to medical practice, we maintain that such a sacrifice is not only justifiable, but a sacred duty.²

On this passage I wish to make several short comments. First, it is couched entirely in theological terms. Second, although these words were uttered more than twenty years before the advent of ether anesthesia, the speaker's problem is not the problem of pain, but that of death. Thirdly, Blundell was incompletely justified in saying of the anti-vivisectionists, "They... do not reflect that the death of an animal is a very different thing from that of a man." According to Alexander Pope, expressing in 1713 an idea which even then was by no means new, "The more entirely the inferior creation is submitted to our power, the more answerable we should seem for our mismanagement of it; and the rather, as the very condition of nature renders these creatures incapable of receiving any recompense in another life for their ill treatment in this."⁸ This may not have been the true

¹Blundell, James. Experiments on the transfusion of blood by syringe. Med. Chir. Tr. Lond., 1818, 9, 56.

² Lancet, 1825-26, 9, 116.

^a The Guardian, No. 61. Tuesday, 21 May 1713. Cf. Edith Sitwell, *Alexander Pope*. Penguin, 1948, 233. The article from the Guardian is reprinted as Appendix A. On Pope's anti-vivisectionism, cf. *ibid.*, 88.

ground of Pope's anti-vivisectionist feelings; but at least the question had been raised, and it had received an answer altogether unlike Blundell's. Humphry Primatt wrote in 1776: "Cruelty to a brute is an injury irreparable because there is no future life to be a compensation for present afflictions." On the other hand-and to this point I shall have to returnthere were many who quite denied that "to an animal death is an eternal sleep."

My second epigraphic quotation is a single sentence. It was spoken a generation after the advent of anesthesia. In 1875, appearing as a witness before the first Royal Commission on Vivisection, John Simon, no opponent of animal experiments, answered in a reassuring way various questions about the use of anesthetics and the practice of "pithing," but said further, "I am anxious not to underrate the real fact that the life of the animal is sacrificed for physiology." Again we are carried beyond the problem of pain; and although no shadow of doubt exists that from first to last anti-vivisectionism has been concerned above all else with the pain endured by animals in the laboratory, I think it is important to notice that in Victorian times, at least, this was not the end of the matter.

One of the most interesting of the Royal Commission's witnesses in 1875 was H. W. Acland, already F. R. S., not yet Sir Henry. He testified to the humanity of the medical profession in the matter of experiments, but looked with suspicion on the increasing number of "biologists now in the country who are not medical men," being "not at all sure that the mere acquisition of knowledge is not a thing having some dangerous and mischievous tendencies in it."5 Unlike Blundell, he did not consider the "votaries of knowledge" to be the steadfast "friends of the human race." Acland provides me with a two-part quotation to conclude my introduction. Although he thought it necessary for students to see certain phenomena in the living organism," he endeavoured wherever possible to avoid all forms of "sacrifice," including the death of an animal.

I should think I was guilty of an immoral and unjustifiable act if I ever showed upon a living animal, so as to cause its death or suffering, a thing which could be shown by diagrams or dissection. I have made hundreds of dissections for the University of Oxford, which are preserved now, in order that these dissections may not have to be repeated.... It is not necessary in order to show the heart of a fish or a rabbit or any creature to destroy the creature to show it, because I have got them put up in the museum.7

^{*}Report of the Royal Commission on the practice of subjecting live animals to experiment for scientific purposes. London, 1876, Sect. 1458.

⁶ Ibid., 944. ⁹ Ibid., 990.

¹ Ibid., 947.

A little later Acland said:

People who cannot agree upon the existence of a future state, or upon the value of Christianity, and upon what therefore is desirable for keeping society together by the higher kind of morality, in fact people who do not know what their aims are with regard to this life or the next, are not very likely to come to an agreement as to the precise relations of man to the sufferings of the other animals placed in the world with him.⁸

Enough has been said and quoted to show very clearly, I think, that an extreme, an exacerbated tenderness of conscience about animal experimentation existed pretty widely at this time, even among leaders of the medical profession, that this sentiment was at bottom religious, and that it somehow went deeper than one would nowadays expect of the liveliest sensitivity to suffering, even when joined to profound religious faith and active piety. The extreme form of the animal cult did not originate among those who sat light to Christian doctrines or those who followed, however intently, a middle course in theology.

1

On the platforms of anti-vivisectionist meetings in London in late Victorian times the most impressive figure, almost invariably, was the spare, ascetic form of Cardinal Manning. He spoke feelingly for the cause, he preached, he wrote, he conferred with the other leaders, he helped in every way to advance the crusade. One is therefore compelled to ask what part was played by his Church, as an institution, in the genesis of the movement.

Solicitude for animals had existed in the bosom of the church for many centuries, as stories of the saints so frequently attest. St. Jerome and St. Gerasimus are unthinkable without their lions, St. Anthony without his swine, and if many of the tales of the hagiographers illustrate chiefly the superhuman authority of the saints (St. Pachome, we are told, "summoned crocodiles to ferry him as one calls a cab from a rank"), others show extraordinary tenderness. St. Malo, for example, would not move his cloak because a wren had nested in it. Helen Waddell has made a book of her translations from medieval Latin sources of stories about the mutual charities between the pre-Franciscan saints and the beasts of every kind, from frogs and hares to hyenas and dragons, stories dating from the end of the fourth to the end of the twelfth century.[•]

⁸ Ibid., 955.

^{*} Waddell, Helen. Beasts and saints. London, 1934.

St. Francis of Assisi remains, however, the most memorable of the saintly lovers of animals, a fact which has contributed no little to his modern popularity in Great Britain. Sir James Stephen called him "this ecclesiastical Orpheus," but also, and more aptly, a *pan-Christian* who

saw the outer world not merely thronged with emblems, but instinct with the presence, of the Redeemer. The lamb he fondled was the Paschal sacrifice. The worm he guarded from injury was "the worm, and no man, the outcast of the people." The very stones (on which he never trod irreverently) were "the chief corner-stone" of the prophet.³⁰

The ox and the ass were no more the kindred of St. Francis than his Brother Sun and Sister Moon, Brother Wind and Sister Water.

Pan-Christianity of this description is too mystical a matter for the common run of humanity, although its consequences may be widely diffused nevertheless. Many of the stories of beasts and saints, particularly of the pre-Franciscan saints, are, however, much simpler and more "primitive," implying no mystic exaltation. According to Helen Waddell they exemplify "the Roman virtue of *pietas* . . . the strong root from which our pity, in every sense, derives."ⁿ If this is so, the root lay long in the ground and the shoots it produced were feeble. In later ages kindness to animals became a saintly virtue which, like unblemished chastity, was left very largely to the saints.

If any group or order has proved, in medieval or in modern times, an exception to this general rule, it has been, as one might expect, the brethren of St. Francis, though not always and everywhere, not consistently, and not, as it appears, with sufficient fervor or authority to alter materially the sentiment of their co-religionists at large. Nevertheless their great founder has been justified of his disciples. It is anyhow not necessary to say about charity to animals, as Langland wrote of all charity, that

... in a friar's frock once was he found, But it is far ago in St. Francis' time.

Something more, one imagines, than sentimental regard for the saint must here be evoked. The greatest of Franciscan doctors, Duns Scotus, a perfectly orthodox authority, unscarred by any condemnations and even upheld (in the dogma of the Immaculate Conception) against St. Thomas Aquinas himself, entertained certain extraordinary views, surprising in one respect at least, about the resurrection of the dead. The solution of this problem proposed by the angelic doctor, Aquinas, seemed to Duns Scotus unsatisfactory in more ways than one, but partly because it left out of

¹⁰ Stephen, Sir James. Essays in ecclesiastical biography. 4th ed., London, 1860, 93. ¹¹ Waddell, op. cit., xix.

account the resurrection of animals, of which the subtle doctor found examples recorded in the lives of the saints.

A son avis, les êtres successifs, comme les animaux, peuvent être reproduits, après destruction, *numerice eadem*, non moins que les êtres permanents qui seraient annihilés. Il est du moins suffisant pour expliquer cette reproduction que le même matière retombe sous l'influence causale de l'agent qui en avait produit, une première fois déjà, les déterminations et les formes. Il ne serait donc pas impossible que des causes créées fussent causes de résurrection. Report., I, IV, dist. LXIII, q. III, n. 1-20. Toutefois la résurrection de l'homme n'est attribuable qu'à Dieu seul. . . .¹⁹

Whether this Scotist opinion was taken over by his admirers, whether, even, it was widely known, I cannot say.¹⁸ It is quite possible that it has had little or nothing to do with the Franciscan attitudes in question. It bears, none the less, a striking resemblance to beliefs which much later, among certain groups of Protestants, were to stimulate humanitarian feeling and also, regrettably, to foment anti-vivisectionism.

That the influence of the gentle medieval saints who cherished birds and beasts was neither clear nor ubiquitous was due to forces of opposite tendency. An ox might speak with the voice of God; another ox might harbor a demon. The Devil's greyhounds were symbols no less compelling than the prophet's ravens; indeed the ordinary mortal might feel himself more likely to be pursued by the first than fed by the second; and in any case, were not crows and ravens birds of the most sinister import? "Poisonous" toads, sly cats and other animals might well be the familiars of witches. A donkey might be the Virgin's steed, or the vesture of an enchanted prince, or the Evil One himself in cunning disguise. Lambs and doves were indeed holy symbols, but other creatures were emblematic of wickedness; the goat, for instance, was notoriously lascivious. What was known or believed of less familiar animals may be gleaned from the emblematic collections of unnatural natural history called physiologi or bestiaries. In short, a complex of ancient half-knowledge and ancient superstitions helped to determine attitudes to the brute creation. Magic remained a potent force. Animals might be treated well or ill for reasons quite unrelated to modern motives.

Nor did the Church stand clear of such notions.

The flight of rooks which St. Edmund Rich saw between Oxford and Abingdon was a flight of devils; St. Dominic saw the devil in a sparrow that hindered his readings;

²⁹ Dictionnaire de Théologie Catholique, A. Vacant, E. Mangenot, E. Amann, eds., Paris, 1930- . t. 4. 2. col. 1933. Article by P. Raymond.

¹⁸ Such modern students of Duns Scotus as Etienne Gilson and C. R. S. Harris seem to have ignored the question.

therefore he plucked it alive; the charming nature-touches in Francis and Anselm and Hugh of Lincoln are not typical, but highly exceptional. Nature was cursed since the Fall. . . .

These are the conclusions of the great medievalist, G. G. Coulton.¹⁴

The many medieval tales of the reverence shown for the Host by animals of every sort are truly miraculous: they exhibit marvellous condescensions of the grace of God.¹⁵ From the canonical viewpoint they are not to be misunderstood as significant of indwelling grace in animals as such. On the other hand, animals may well be satellites of Satan "instigated by the powers of hell and therefore proper to be cursed."

St. Thomas Aquinas made it clear once for all that man is master over all things not in the image of God. As for animals,

... by the divine providence they are intended for man's use according to the order of nature. Hence it is not wrong for man to make use of them, either by killing or in any other way whatever. For this reason the Lord said to Noe [Gen. ix. 3]: As the green herbs I have delivered all flesh to you.

And if any passages of Holy Scripture seem to forbid us to be cruel to brute animals, for instance to kill a bird with its young [Deut. xxii. 6], this is either to remove man's thoughts from being cruel to other men, lest through being cruel to animals one become cruel to human beings; or because injury to an animal leads to the temporal hurt of man, either of the doer of the deed, or of another; or because of some signification, as the Apostle expounds [I Cor. ix. 9] the prohibition against muzzling the ox that treadeth the corn [Deut. xxv. 4].¹⁶

On the whole, the folk conception which seems to be mirrored in the lives of the early saints was opposed by ecclesiastical authority." In the criminal prosecution and capital punishment of animals we have what appears abundant evidence that all agreed in regarding them as responsible agents.¹⁸ This is illusory: many churchmen, certainly, had little doubt that "criminal" beasts were instigated, even "possessed," by spirits of evil; later

¹⁴ Coulton, G. G. Five centuries of religion, I, Cambridge, 1923, 179. There are many stories of saintly wrath at the interruption of study or devotion; cf. *ibid.*, 81, n. 2; Waddell, *op. cit.*, 121. The mice of Inish Ubdain despondently threw themselves into the sea when cursed by a saint for gnawing his shoes.

 ¹⁵ Coulton, op. cit., I, 491-94 (App. 15).
¹⁹ The basic writings of Saint Thomas Aquinas. Anton C. Pegis, ed., New York, 1945, vol. 2, 222 (Summa Contra Gentiles, Book III, Chapter CXII.) Scotus was born in 1274, the year of the death of Aquinas.

¹⁷ Although Aquinas discouraged the waste of blessings, the "Benediction of Beasts," usually performed on St. Anthony's Day, has not been prohibited. This seems to be in no way different from the blessing of fields and buildings. Like the racehorses blessed in church at Siena before racing in the Palio, the animals carry more than their own concerns. The "temporal hurt of man" must be prevented.

¹⁸ Evans, E. P. The criminal prosecution and capital punishment of animals. London, 1906.

it was to be suggested, half in earnest, that the brute creation generally might be the abode of the fallen angels. Such views were hardly conducive to sentimentality. But whereas priest and layman could both look upon a dog as the outward form of a demon, only the laity, primitive in innocence, could "canonize" a greyhound.³⁹

No Christian communion has ever taught kindness to animals as a part of dogma. What has been said of the Roman Church does not mean that it has in any way condoned cruelty. Despite the examples given by some of its saints, it has, however, proffered comparatively little official encouragement to animal welfare movements, at least until quite recently.²⁰ The matter may perhaps be summed up fairly by saying that it has always stood, and still stands, for the anthropocentric view of the universe which leaves small scope for excessive sentiment in favor of animals. Whatever part, positive or negative, the Church may have played in this branch of humanitarianism generally,²¹ it can hardly be charged with any rôle but a restraining one in the development of the modern animal cult.

It is true that Dr. T. I. M. Forster (1789-1860), physician, naturalist, and astronomer, who was an anti-vivisectionist and one of the founders of the Animals' Friend Society, was a devout Roman Catholic, but he was converted to Rome during the eighteen-twenties and his family background, as the accompanying table shows, was Evangelical and Rousseauistic. With such an inheritance as this, Dr. Forster, whose profession brought animal experiments to his notice, was almost foreordained to dislike and oppose them. His personal religious creed appears, in the circumstances, nearly irrelevant, except insofar as it contained unorthodox elements derived from the East. Finally it may be noted that the co-founder with Dr. Forster of the Animals' Friend Society was a tender-hearted and philanthropic Jew, Lewis Gompertz.

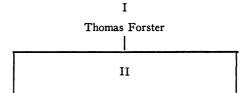
¹⁹ Coulton, G. G. A mediæval garner. London, 1910, No. 151.

²⁰ Westermarck points out that Pius IX refused permission for a society for the prevention of cruelty to animals in Rome, saying it was a theological error to suppose that man has any duty to animals. Westermarck, Edward. *The origin and development of moral ideas*, New York, 1910, *II*, 506-507.

²¹ For a list of Roman Catholic sources claiming for the Church a part in this development, see Harwood, Dix. Love for animals and how it developed in Great Britain, New York, 1928, 13. As far as I have examined these sources, they consist almost altogether of the stories of the love of saints for animals. Coulton, Five centuries of religion, I, 81, n.2, remarks: "The most that can be said on that side is collected in a little book by the Marquise de Rambures, L'Eglise et la Pitié envers les Animaux, 1903. But far more characteristic is the monk's frequent dislike of being disturbed by animals." Many tales of saints and beasts are to be found in the Acta Sanctorum, in Lecky's History of European morals and in Count de Montalembert, Monks of the west, New York, 1896.

TABLE 1.

A Forster family tree, based on articles by G. S. Boulger in *The Dictionary* of *National Biography*, illustrating some of the elements which have gone to the formation of the animal cult. This familial tradition shows an interesting mixture of Evangelicalism (for three generations) with Rousseauism. T. I. M. Forster and Lewis Gompertz were anti-vivisectionists. The Animals' Friend Society was a splinter group of the R.S.P.C.A.



Edward Forster, the elder (1730-1812) banker and merchant. "Though neither a sportsman nor a practical naturalist, he was very fond of horses and dogs, and was an ardent lover of nature." An admirer of Rousseau. Father of a trio of botanists. Benjamin Forster (1736-1805) rector. "He was somewhat eccentric, surrounding himself with multifarious pet animals, to whom he was much attached."

\mathbf{III}

- -1. Thomas Furly Forster (1761-1825) man of business and distinguished botanist. He published a *Flora Tonbrigensis*, but "his fondness for animals made him refuse to prepare an account of the fauna." An admirer of Rousseau.
- 2. Benjamin Meggot Forster (1764-1829) business man and botanist. "Ceaseless in his exertions in the cause of humanity, he was one of the earliest advocates of emancipation, and one of the first members of the committee of 1788 against the slave trade. He also joined the societies for the suppression of climbing chimneysweepers, for diffusing knowledge respecting capital punishments, for affording refuge to the destitute, and for repressing cruelty to animals, he being conscientiously opposed to field sports."
- 3. Edward Forster, the younger (1765-1849). A man of business, he was also a vice-president of the Linnean Society. "With his brothers he was one of the chief founders of the Refuge for the Destitute in Hackney Road."

IV

Thomas Ignatius Maria Forster, M.D. (1789-1860) physician, naturalist, and astronomer. "Both his father and grandfather being followers of Rousseau, his literary education was neglected." A disciple of Gall and Spurzheim, he introduced the word "phrenology" into the English language (1815). "In 1812, having been, from his study of Pythagorean and Hindu philosophy and an inherited dislike of cruelty to animals, for some years a vegetarian," he published a work "denying man to be by birth a carnivor," which attracted the interest of Abernethy. He seems to have been converted to Rome in the course of the eighteen-twenties. Boulger says that he "had some difficulty in demonstrating the orthodoxy of his Pythagorean doctrine of 'Sati,' or universal immortality, including that of animals," on which he published a particular work in 1843, though he seems to have adverted to the subject earlier. "In conjunction with his friend [Lewis] Gompertz he founded the Animals' Friend Society." Of course it was by no means invariably true that the Roman Catholic supporters of the anti-vivisection movement were converts to Rome, like Manning and Forster, or had, like the latter, familial strains of philanthropy and zoophily. "Old Catholics," too, were involved in the characteristic national sentiment. But nothing more clearly indicates the national character of this British crusade than the contrast of the Holy Father's refusal to take part in it, the rebuff which the anti-vivisectionists received from the Archbishop of Paris, and similar Continental misfortunes, with the enthusiastic championship of the cause by certain representatives of the hierarchy in England. The Roman Church, as such, stood aloof from the controversy.

Except for parts of the Scandinavian countries and Switzerland, the nations of Europe have given little countenance to this movement, outside its principal citadel, the British Isles. In France, Spain, and Italy it has had small scope; in Germany, before the advent of Hitler, who brought it with him, it was neither large nor greatly troublesome. Again, in the Spanish and Portuguese civilizations of Latin America it has not amounted to much; but in English-speaking North America, and particularly in certain parts of the United States, it has been lively and dangerous. I am not aware that it has ever flourished in any country predominantly Roman Catholic. (Southern Ireland is a possible exception. I venture to guess that English influence does not suffice as an explanation and that we must look to the Irish Franciscans.) On the other hand, not all Protestant countries have shared the sentiment of England in taking the furred and feathered creatures to her heart of hearts. Wherever anti-vivisectionism has appeared, in lands Protestant or Catholic, the indigenous element has usually been small (with certain exceptions in the past which I shall mention later) as compared with the factor of English contagion.

2

The Reformation is commonly supposed to have meant, among other things, a return to the Bible. It resulted, at any rate, if it did not begin, in translations of the Scriptures for popular use. What support did the antivivisectionists find in the Book of Books? What has it contributed to the development of the animal cult?

With the possible exception of the famous verse on the fall of a sparrow (Matt. 10.29), Biblical authority for tenderness in the treatment of animals is hardly to be found in the New Testament. It is discovered, rather, in certain precepts in Deuteronomy (22.6,10; 25.4)—an exhortation to spare the mother bird when taking her eggs or young, a rule against plowing with an ox and an ass together, and another against muzzling an ox when it

treads out grain. To these may be added the saying (Prov. 12.10) that "a righteous man regardeth the life of his beast," and several verses to the effect that the Lord tends and spares them (Ps. 36.6; 104.14; 147.9).

Whether or not any particular passage in this roster was intended as a help to clemency may be open to doubt, and some of the words may be otherwise interpreted by critical Biblical scholars, by philologists, historians, or anthropologists. We have already seen that medieval Churchmen were very careful not to permit any encroachment by the beasts on the privileges and pleasures of man in a God-given but man-centered world, and that they derived authority so to do chiefly from St. Paul. Another great religious tradition, however, seems to have found a different message in the Old Testament, one which it cherished and magnified. Many of the enactments of the rabbis with regard to the brute creation show much warmer and more explicit feeling than can be found in the Testament itself, and the medieval moralists of Judaism often exhibited lively sympathy with animal suffering and strong abhorrence of every form of cruelty to brutes.²²

Forgoing any analysis of the Pentateuchal precepts, and assuming that they mean approximately what they have been taken to mean by modern defenders of animals, it is necessary to put over against them evidence of another kind. For a pastoral people, their animals had great economic, for a devout people, great religious importance. Beasts are mentioned again and again in terms of property, but "to make a difference between the unclean and the clean" is the purpose of the greater part of what the Old Testament has to say of them. Over and above this, certain animals were regarded as "abominations" in a special sense. The dog, which surpasses even the horse in the affections of the English, is mentioned in the Bible more than forty times, almost always with loathing and contempt. It is fierce, voracious, and incontinent. It is the emblem of lust and all uncleanness. Frances Power Cobbe was probably thinking chiefly of this when she wrote of "the special Semitic contempt for brutes, which has unhappily passed with our religion into so many of our graver views."28 She wrote elsewhere that dogs were highly valued in ancient Egypt, Persia, and India, but that in all the literature of Palestine she had been able to find only one reference to a dog, and that in the Apocrypha, which was untinged with contempt. She thought that "had it but been recorded of any eminent canonical Prophet or Apostle, as of the virtuous (but alas! apocryphal) Tobit, that he had a Dog which

²² Universal Jewish Encyclopedia, I, 326, Art. "Animals." The Cabalists and the Hasidim believed in metempsychosis.

²⁸ Cobbe, F. P. Darwinism in morals, London, 1872, 2.

followed him on his pious journeyings, the fate of all the dogs in Christendom would have been improved.""4

If these remarks by the ablest and most strenuous leader of the antivivisectionists in the later nineteenth century do not constitute the last word on the attitude of the Biblical peoples to the rest of animate nature, they show, at any rate, how disappointing the Scriptures might prove to one who sought very earnestly the most trifling indication of support for her crusade in every famous book from the Bible to Alice in Wonderland, interpreting as such all signs of humanity to brutes.

It has been argued, nevertheless, that the emphasis placed on the Old Testament by Calvinism (in contrast to the New Testament emphasis of Lutheranism) brought it about that the English Free Churches learned kindness to animals from Old Testament texts.²⁵ This contention is perhaps not disproved by the fact that Calvinism has by no means dominated the religious history of England. It is, however, much weakened by the mere absence of specific evidence. The writings of the English Calvinists themselves seem to be rather deficient in this particular, at least until a late period, as compared with the literature of the other Nonconformist communions; nor is there much reason to think that Calvinism outside of England has borne any such fruit. Like all forms of Christian humanitarianism, the promotion of kindly feeling toward animals is founded to a large extent on New Testament theology, even although it is hard to point to chapter or verse as definite sanction. Furthermore, beliefs of anti-Calvinist nature, Arminianism and related doctrines, were particularly important in the growth of humanitarian sentiment. When preachers of such beliefs chose their texts from the Hebrew Scriptures the selection was of course determined by their tastes in divinity, and the exegesis was colored by their special lights. A sermon is not always conceived to illustrate a text: a text may be chosen to illustrate a sermon. Henry Ward Beecher confessed in the 'seventies that only when his eyes had been opened by the S.P.C.A. did he begin to perceive a noble tenderness for animals in the Old Testament." On the animal question, as on other points of theological interest, attention was focussed through a system of lenses which the history of religion and philosophy had interposed. The Pentateuchal precepts on animals came to be chosen frequently by preachers of special faiths, and the significance of these verses was no doubt exaggerated. What is important is that the texts seemed unambiguous and that they provided Scriptural authority. Equally

²⁴ Cobbe, F. P. The friend of man; and his friends, the poets, London, 1889, 35. ²⁵ De Levie, Dagobert. The modern idea of the prevention of cruelty to animals and its reflection in English poetry, New York, 1947, 50 ff. and the literature cited there. ²⁶ Steele, Zulma. Angel in top hat, New York, 1942, 287.

vital were the various passages indicating and defining the authority of man over the rest of creation, as well as those on animal sacrifice and its discontinuance. The ancient meaning of these passages, so far as it may have differed from the modern, is irrelevant. That the modern views in question have any special connection with Calvinism remains unproved.

I have said that anti-Calvinist faiths were of particular importance to the growth of humanitarianism generally. A theology as harsh, exclusive, and pitiless as Calvin's, a God as stern and logical as the God of Geneva, could hardly be expected to contribute inspiration to humane endeavour. Calvinists as men and women took part in such efforts certainly; but in so doing they seem to have shown greater mercy and loving-kindness than they were willing to attribute to the Deity. But the harshness of an earlier era was slowly melting throughout the nineteenth century, like an iceberg in warmer seas. Theology-the central interest of so many educated Victorians, even those in the realm of science-was not unaffected. Moreover, rationalism, though not yet in the ascendant, was making deep inroads into divinity. Milman was stopped in the street by a group of porters who required to know if it was true that God had commanded the Israelites to commit atrocities in Canaan.²⁷ A new consistency required the Godhead to show Himself as the God of Love as he was proclaimed. At the same time, humanitarians (in the theological sense) having stripped away the attributes of divinity, conferred on the Supreme Being the one great virtue which is known by the name of humanity. Not content with the gift of human virtue, they added a touch of human folly. Some of the early contributions to specific anti-vivisectionist literature were the work of Unitarians.28

Lastly, it was expected of God that he would show mercy at the last. The Arminians had thrown open the gates of salvation; entry was no longer restricted to the Calvinistic "elect." Universalism, the opinion that all men will ultimately be saved, and annihilationism, or "conditional immortality," were widely debated. These doctrines were in no way novel. Universalism had been espoused by Clement of Alexandria and Origen. But in some form or other they were becoming more widely accepted. F. D. Maurice was ousted from his chair at King's College in 1853 because he ventured to

²⁷ Young, G. M. Victorian England: Portrait of an age, Anchor Books ed., New York, 1954, 107-108; original O. U. P. ed., London and New York, 1936, 69.

²⁸ The Rev. Dr. William Hamilton Drummond, a prolific poet and prose-writer and a redoubtable controversialist in the Unitarian cause, was the author of *Humanity to* animals, the Christian's duty, 1830, and On the rights of animals and man's obligation to treat them with humanity, 1838. Both contain evidence of anti-vivisectionism. A memoir of the author by J. Scott Porter is prefixed to Sermons by the late Rev. W. H. Drummond, 1867. (All three books were published in London and Edinburgh.)

express disbelief in eternal punishment. In 1860, in response to the challenge of Essays and Reviews, about half the clergy of the United Church of England and Ireland reasserted their faith in "the Inspiration of the Word of God and the Eternity of Future Punishment." It was already too late. As Douglas Bush has said, Essays and Reviews "led to a trial and to Lord Westbury's dismissing hell with costs and taking away from orthodox members of the Church of England their last hope of everlasting damnation."20 In 1877, Dr. Frederick W. Farrar preached in Westminster Abbey his famous and controversial series of sermons on "Eternal Hope," a strong indication that, as he put it, "the old, coarse, cruel conception, once unhappily universal, of hell as a hideous torture-chamber of vivisection" was giving way to softer concepts. He expressed his opinions that the fire of Gehenna is metaphorical, that there is a possibility of future purification, and that most men will at last be saved.^{at} It is true that C. H. Spurgeon, the greatest popular preacher of nineteenth-century Britain, condemned Universalism, or "the larger hope," as amoral, and initiated in the 'eighties the so-called "Downgrade Controversy" over this and other aspects of "Modernism." The divine mercy which is from everlasting to everlasting was nevertheless preached by others with new conviction, and many chose to believe, with Lord Tennyson,

> That nothing walks with aimless feet, That not one life shall be destroyed, Or cast as rubbish to the void, When God hath made the pile complete.

The new doctrine was carried to extraordinary lengths. St. George Mivart, writing in *The Nineteenth Century*, delivered himself of the opinion that "no one in the next life suffers the deprivation of any happiness which he can imagine or desire, or which is congruous with his nature and faculties, save by his conscious and deliberate choice." Consequently, "Hell in its widest sense—namely, as including all those blameless souls who do not

²⁰ Bush, Douglas. Science and English poetry: a historical sketch, 1590-1950. The Patten Lectures, 1949 (Indiana University), New York, 1950, 131.

⁸⁰ Farrar, F. W. Men I have known, New York and Boston, 1897, 32; cf. ibid., 181-82, 195-97.

^{as} Farrar, F. W. *Eternal hope*, New York, 1890; for a list of his contemporaries who held somewhat similar views, see 174 ff. Although Farrar was subjected to much criticism and even abuse, he was never reproached by the Archbishop of Canterbury and was defended by the Archbishop of York. Pusey undertook a rebuttal but actually conceded the principal points. Cf. Elliott-Binns, L. E. *Religion in the Victorian era*, London, 1936, 281, where it is said that Farrar, in his debate with Pusey in 1879, confessed that he had not a sufficient knowledge of the views either of the early fathers or of his antagonist—in particular on such important points as the notion of material tortures and the idea that the greater part of humanity is damned.

enjoy [the unwanted] Vision—must be considered as, for them, an abode of happiness transcending all our most vivid anticipations," so that "there is, and there will for all eternity be, a real and true happiness in hell."³²

Its fires extinguished, its last whiff of brimstone blown away, hell had become a celestial suburb—cut off by a little distance from the City of God but essentially a part of it. The new hell was like—why, it was like heaven! And the old hell? It was, as Canon Farrar observed, like nothing on earth but a physiologist's laboratory. It is not mere coincidence that St. George Mivart, a fine anatomist and famous teacher, as well as a somewhat clamorous anti-Darwinian, veered into the party of the anti-vivisectionists. If the old hell had been abolished, then surely its nearest earthly counterpart must be abolished too. Should hell remain here when given up hereafter? Should loving kindness which reached beyond the skies and penetrated to the foundations of the world be frustrated by a laboratory door? "Physiology" might almost be said to have replaced "hell on earth" as the symbol and criterion of anguish.

Lesser grades of wretchedness, too, found their measure in the laboratory, and when Ouida wished to say that slum existence was a direct cause of vice, she wrote that slum dwellers were driven into wickedness "to escape from the monotony which surrounds them and which leaves them no more charm in life than if they were rabbits shut up in a physiologist's experimenting cage, and fed on gin-soaked grains."³⁸ This was no "mere" figure of speech, for Ouida, too, was devoted to the animal cult. The burning lake of old, the brothels, the opium dens of contemporary London—how should one describe such horrors? In terms of physiology. They were to be likened to laboratories. If, then, a new conscience in metaphysic stilled or extinguished the fires of hell, while social conscience strove to transform the slums, clearly enough the archetype of all horror, pain and distress, the physiological laboratory—hell's successor, Satan's modern citadel—had to be attacked remorselessly.

It is one of the most striking phenomena of modern times, and particularly of the nineteenth century, that pain, physical pain, has become intolerable, either to endure or to contemplate. The late Dean Inge sought to explain this in aesthetic terms. Comparing the beauties of ancient art, and ancient insensitivity to the infliction of pain, on the one hand, with modern

⁸⁹ Mivart, St. George. Happiness in hell. The Nineteenth Century, 1892, 32, 919.

³⁸ Ouida. The ugliness of modern life. The Nineteenth Century, 1896, 39, 33; cf. *ibid.*, 29: "The people are taught to think that all animal life may be tortured and slaughtered at pleasure; that physical ills are to be feared beyond all others, and escaped at all vicarious cost. . . . This is not the temper which makes noble characters. . . ."

architectural atrocities, like the Albert Memorial, and modern susceptibility to all forms of pain, on the other, he wrote about "transferred aesthetic sensibility."³⁴ What this means I am not very sure. At any rate, the modern susceptibility to pain is a fact. That the changes in theology I have described have caused this phenomenon I do not suggest: the influences may have been the other way around. That either of these things has "caused" the anti-vivisection movement I do not assert, except in the qualified sense which my title implies. All I can say is this, that these various concepts and ideas have flourished in the same hedgerow and have come to flower at the same time.

We have wandered a long way from Calvinism. There are other reasons, as I hope to show, for believing that Arminianism and similar doctrines have been closely related to humanitarianism, with its deformed offspring, anti-vivisectionism. But at its most anti-Calvinist point, its view of the chances of salvation and the nature of the after life, the Arminian creed opened a way to modern Universalism; and at the end of the path lay "real and true happiness in hell," for hell was no longer "a torture-chamber of vivisection."

Let me not imply that Calvinism is totally irrelevant to my story. I believe it is true and important that, as Dean Inge observed in his book on Protestantism, Free Churchmen learned from Calvin that they were to be "fellow-workers with a transcendant God, not in the mystical sense . . . but as soldiers in an army on the side of God against the powers of evil."³⁵ When biological science came to be viewed as one of the powers of evil, the militance of its opponents did not lack this inspiration. Nor should we forget that while Wesley was an Arminian, Whitfield was a Calvinist, and the ardor of the eighteenth-century Revival was partly owing to him. Perhaps, too, the extensive legalistic and theological dispute about the "law-fulness" of subjecting animals to certain uses falls within Calvinist tradition.

Other important offshoots of reformed religion have been of no great significance in this particular. Lutheranism itself, or the various Lutheranisms, have been occupied since the sixteenth century, much more absorbedly than the principal English sects, with matters of purely theological concern; practical Christianity in the political or public sense has felt an impulse correspondingly feebler. It is also true that some, at least, of the divisions of Lutheranism have remained as strongly anthropocentric as the faith they were born to replace.

²⁴ Inge, W. R. Religion, in *The legacy of Greece*, R. W. Livingstone, ed., Oxford, 1921, 39-40.

³⁵ Inge. Protestantism. London, 1931, 61.

As I shall presently suggest, English religion ignited a powder train laid down by philosophers; a similar train lay harmlessly unlit across Latin territories; in the Germanic lands, however, where Lutheranism sputtered in controversy, powder of this sort was sparse and damp. Schopenhauer and certain lesser sages furnished what there was; but Kant, Hegel, and most of their colleagues supplied hardly a grain. Condescension to popular and humanitarian democracy, which in England seems to have extended, in some fashion, not only through the "lower" orders of society and the "inferior" races of mankind but even beyond the limits of humanity itself, got little enough encouragement from either pastors or philosophers in Germany. The qualifications which ought to be introduced at this point would require too much space. Suffice it to say that the greatest importance of Germany to our story probably lies in a roundabout contribution, the influence of German pietism on the early evangelicalism of England.

No great insight is required to conclude that the new dispensation of love, however expressed, was more important for the growth of zoophily than all the precepts on animals; the conclusion is, in fact, too easy, for many other factors are involved. Increasing emphasis on the gospel of love was insufficient in itself to draw the animals within its scope.

3

The considerations which raised the brute creation to the level of man's eve were numerous and varied. We must turn back for a moment to those which seem most important.

While never quite free of religious connotation of some sort, the love of animals, or at any rate the admiration of their supposed virtues, had been developed as a recurrent theme in philosophy and literature, not, however, without opposition.

Although Bartholomew the Englishman, writing in the thirteenth century, tried to show, in the supposed participation of the war horse in the martial sentiments of his master, how "the kind of horse and of man is medlied,"" the humanizing of brutes in a serious, sentimental way, and not in the spirit of satire and fable, is characteristic chiefly of modern times. "Not till the time of Erasmus," says Harwood, "do we find many references to battle-loving horses and remorseful weasels."" In the late nineteenth century Landseer was painting horses and dogs not in his earlier naturalistic style, but rather, as John Piper has remarked, "with human eves."

²⁶ Mediaval lore from Bartholomaus Anglicus, London, 1907, 151; quoted by Harwood, op. cit., 35. " Ibid., 36.

"Theriophily"-the philosophical and literary admiration of animals, at first with particular reference to their allegedly noble and exemplary conduct-has been studied by Boas, who designates it a sub-variety of primitivism, with Montaigne (though he was not the first of the theriophilists) to mark the beginning of this development as it appeared in French thought of the seventeenth century.³⁰ The "happy beast" in some sort supplied the place of the happy, or noble, savage in primitivistic doctrine. Animals, and especially the social creatures like insects, were represented as models of virtue and behaviour. Such human arts as statesmanship and medicine were said to have arisen through imitation of animal arts; hence, it was claimed, man has no right to set himself above the beasts, but should rather turn to them for instruction. All this was sustained and illustrated by tales taken from Aristotle, Pliny, Plutarch, and Ælian. While Boas maintains that much of it was "paradoxical" in Montaigne, in his disciples, notably Pierre Charron, it was far more serious. Its tendency, clearly, was to undermine the orthodox, anthropocentric view of things, and this earned it the enmity of Chanet, an anti-Copernican, and of all those, generally speaking, who insisted that the universe was made for man.³⁹

Charron, echoing one of Montaigne's opinions, which was perhaps derived from Stoicism through the agency of Plutarch, professed to find more difference in reasoning power between men than between man and beast.⁴⁰ Reason was the attribute of the soul, or of that particular division of the Aristotelian tripartite soul to which the unmodified noun most commonly referred. This soul of reason had been denied to brutes by Augustine and Aquinas, and Aquinas had been much concerned in developing a doctrine of instinct. The problem now reappeared, and the debate gradually shifted from the question, "Do animals live noble and exemplary lives?" to the question, "Do they have souls?" This, in turn, was the progenitor of other questions : "Do animals have reason or only instinct?" "Do they share the emotions of man?" "Can they appreciate beauty?" "Are they capable of any sensations whatever?" The answers to these secondary questions were to determine the great issue of the animal soul.

This brings us to Descartes, anti-theriophilist, proponent of the animal machine, and one of the chief villains of humanitarian and anti-vivisectionist

⁸⁸ Boas, George. The happy beast in French thought of the seventeenth century, Baltimore, 1933.

⁸⁹ Ibid., 74-75.

⁴⁰ Ibid., 58. Rorarius, too, sought to rehabilitate the animal soul as capable of learning. The principle notions in regard to animals from the ancients down to 1697 are found in the famous *Dictionnaire Historique* of Pierre Bayle, in the articles on "Rorarius," "Pereira" and "Barbe." I have used the English edition of 1734-38.

literature. The doctrine that animals are machines was put forward by Gomez Pereira in the sixteenth century, but was independently conceived by Descartes in the seventeenth, and formed an important part of his philosophy. This gave rise to extended argument. Like Aquinas, Descartes denied to animals the light of reason. He believed that a rational soul must be immortal; and in much of the later debate rationality and immortality were equated. He believed, too, that rational beings must be able to communicate their thoughts, and that the speechlessness of the animals is a sure sign of their mindlessness. A hot controversy followed. Is speech the *sine qua non* of reason? Are the beasts truly speechless? On the question of *sensus* in animals, Descartes was ambiguous; Malebranche and other Cartesians, however, insisted on the total absence of sensation, or at any rate of pain.

According to Balz the doctrine of automatism did not have primarily a "scientific" interest. "The position was welcomed less because it supplied a metaphysical foundation for the scientific study of the animate order than because it furnished a new support for ancient convictions . . . On the other hand, the conception of animals as machines was a difficulty to many, both Cartesians and anti-Cartesians, precisely because it could not be reconciled with certain historical ideas and constituted a veiled threat against theology."^a The nature of the threat need not be explained in detail here; the principal danger was that too much might be proved, and that man, too, might emerge as an automaton. As for the theological advantages of the position, they are easy to see. Automatism deprives the brutes of sensibility, hence also of suffering. The principle that only sinful creatures suffer is not contradicted, a stumbling block is neatly sidestepped, and the proof of original sin by an argument from the suffering of infants is left unimpaired.

Pain is not to be understood except as the punishment of sin: a just and loving God would not permit animals to suffer undeservedly and without even the hope of a future life, and would not permit us to tyrannize over His other children if they were His children in the sense that we are. God is good. Animals have no immortal souls. Having no free will, they cannot misuse it. It follows that they do not suffer pain.

Some of the opponents of Cartesianism simply reversed this chain of reasoning. Animals, they said, obviously suffer pain. Since God is good, it follows that animals have souls, that they, too, have the hope of a future life, and that since they are God's children in the same sense that we are, it is sinful in us to abuse them. They must assuredly reason, exercise free will,

⁴¹ Balz, Albert G. A., *Cartesian studies*, New York, 1951, 108. Balz's 50-page essay, Cartesian doctrine and the animal soul, is the best compendious account of the matter.

and be guilty of sin, thus meriting their pain; it is not unreasonable to suppose that they must also survive death.

The degree to which "scientific" interest entered into the question is shown by the use to which Cartesian arguments were put. If the parallel between the behaviour of the brute, a soulless machine, and man, the machine with a rational soul, became uncomfortably close, it was helpful to distinguish in man between those processes proceeding from the pure mechanism of the body and those depending upon the union of body and soul. Reflex actions, aimed solely at conservation of the body-machine, were pointed out as belonging to the former class, actions of higher purpose, transcending animalism, to the latter. Reflex, or "absolute involuntary" movements, were those said to be unassociated with cognition or with pain. Thus "soul" could be denied to the animal-as it had long been denied by Church authority-and bypassed in man, but in the case of man only when the correlation of stimulus and reaction could be attributed to the structure of the machine without prejudice to teleology. The economy of explanation thus achieved had the incidental effect of opening a path for science. Specifically, also, it left room for experimentation on brain and nervous system of a kind which orthodox theology had appeared to discourage.42

One curious argument was capable of being used either way. Bossuet maintained (he was not the first to do so) that beasts do not reason but are governed by the intelligence of their Creator: their apparent wisdom is really that of their Author." Bernard is quoted in this sense as saying Deus est anima brutorum. The idea seems to have been that animals have a sort of built-in wisdom which simulates reason. Boas indicates "the affiliations of this point of view with that of the platonistic pantheists who based their religious admiration of Nature (v. Wordsworth, for instance) on its revealing God's spirit." At the same time Bossuet is constrained to question the granting of sensation to animals because sensation is immaterial, and if the beasts have it they have a soul distinct from the body-a spiritual, and hence immortal soul-and to accept this viewpoint is to fall into the error of the Platonists. "Bossuet," says Boas, "here is referring to the neoplatonists with their doctrines of anima mundi and the like, doctrines which were very close to pantheism if not identical with it. Henry More was, for instance, an opponent of Descartes as far as Descartes's theory of animal behaviour was concerned." While we are also told that "the earlier Platonists seem to have been anti-theriophiles," there is no apparent reason

⁴² Cf. the passage, *Cerebri functionum examen*, in the last chapter of the last book of the *Fabrica* (ed. 1555, 822, 1. 18) and translation by Benjamin Farrington, Trans. Roy. Soc. of South Africa, 1931, 20, Pt. I, 10 (reprint). ⁴⁵ Boas, op. cit., 98, 103-105.

to doubt that from Henry More to Wordsworth platonistic pantheism, at least in its English manifestations, was on the side of the animals; this despite the fact that the very similar doctrine summed up in the saying, *Deus est anima brutorum*, was used by various writers in support either of the Thomistic or the Cartesian view, or of both, since they were not unrelated. Henry More wrote to Descartes on the subject of automatism:

In this I do not so much admire the penetrative power of your genius as I tremble for the fate of animals. What I recognize in you is not only subtlety of thought, but a hard and remorseless logic with which you arm yourself as with a sword of steel, to take away life and sensation with one blow from almost the whole animal kingdom."

Some there were who professed themselves believers in the animal machine, yet trembled for the fate of the animals. John Norris of Bemerton, for example, agreed in point of theory with Descartes and Malebranche about animal automatism,

yet, after all, lest in the Resolution of so abstruse a Question our Reason should happen to deceive us, as 'tis easy to err in the Dark, I am so far from incouraging any practices of Cruelty, upon the Bodies of these Creatures, which the Lord of the Creation has (as to the moderate and necessary use of them) subjected to our Power, that on the contrary I would have them used and treated with as much tenderness and pitiful regard, as if they had all that Sense and Perception, which is commonly (tho' I think without sufficient Reason) attributed to them. Which equitable Measure, they that think they really have that Perception, ought in pursuance of their own Principle, so much the more Conscientiously to Observe.⁴⁶

One at least of the (comparatively few) English "automatists" was thus so little certain of his ground that he urged a general assumption of the opposite view in practice. Among English poets, De Levie seems to have found only one—William Somerville (1675-1742)—who was wedded to automatism, referring to animals as "clock-work" or "mere machine."⁴⁶ English philosophers and scientists did not, on the whole, accept the unmodified mechanistic theory.

Professor Lovejoy has written of a form of anti-intellectualism which found expression in part in eighteenth-century diatribes against "pride,"

[&]quot;E. B., 11th ed., V, 418.

⁴⁵ Norris, John. An essay towards the theory of the ideal or intelligible world, London, 1701, II, ii, 44; quoted by Harwood, op. cit., 95.

⁴⁰ De Levie, op. cit., 46. Englishmen did not altogether miss the theological point. Cf. Kenelm Digby. Two treatises, in the one of which, the nature of bodies; in the other, the nature of mans soul; is looked into: in way of discovery, of the immortality of reasonable soules, Paris, 1644, 306 (London, 1645, 374): "how all the actions of sensible bodies may be reduced to locall motion," disproving that "beastes use discourse ... and are endewed with reason." Aristotle was nearly as useful for the purpose as Descartes. Digby was of course Roman Catholic.

the generic pride of man.⁴⁷ "The featherless biped, it was observed, has a strange tendency to put himself in the centre of the creation, to suppose himself separated by a vast gap from all other and 'irrational' creatures, to credit himself with the possession of virtues of which he is inherently incapable, and to attempt tasks, especially intellectual tasks, which he has in reality no power to accomplish." Such pride had been fostered, at least in some measure, by the medieval Church. "But there were certain ideas especially current in (though not original with) the eighteenth century which forbade mankind to hold any such flattering opinion of itself."

Among these was "the so-called 'principle of continuity,' lex continui, one of the components of the conception of the Great Chain of Being," which is dealt with at length by the same author in the famous book of that name.

According to this conception . . . every logically possible kind of being, through all the infinite graded scale of conceivable "natures" between Deity and nonentity, must necessarily exist; and between any two adjacent links in the chain there can be only infinitesimal differences . . . Since all gaps thus disappeared from nature, there could be none between man and the other animals. He could differ from them only in degree, and from the higher animals in an almost insensible degree, and only with respect to certain attributes. No link in the Chain of Being, moreover, is more essential than another, or exists merely for the sake of another. The lower creatures are no more means to the convenience of man than he is a means to their convenience.48

Now clearly

the conception of the graded scale of being tended to fix attention especially upon the limitations of man's mental powers. Moreover, the primitivism which had long been associated with the cult of the sacred word "nature" had expressed itself, among other ways, in the disparagement of intellectual pursuits and the depreciation of man's intellectual capacity. In the sixteenth century both Erasmus and Montaigne had dilated upon the vanity of speculation and the corrupting influence of science . . . This strain, less in evidence in the seventeenth century, the age of great systems in philosophy and science, became in the eighteenth one of the most popular of commonplaces. Finally, the reigning philosophy of the period, in England and France, that of Locke, has as its characteristic aim to fix the boundaries of human knowledge; and it ostensibly found those boundaries to be very narrow. In consequence, chiefly, of the convergence of these three lines of influence, it became customary to berate and satirize all forms of intellectual ambition, and to ascribe to it a great part in the corruption of the natural innocence of mankind.49

A doctrine which does these two things-which narrows or annihilates the gap between man and the animals and which, at the same time, ridicules

⁴⁸ Ibid., 64. ⁴⁹ Ibid., 66-67.

⁴⁷ Lovejoy, Arthur O. Essays in the history of ideas, Baltimore, 1948, Essay IV: "Pride" in eighteenth century thought, 62-68.

intellectual endeavour-would seem to provide the ideal soil for the germination of anti-vivisectionism. And so it did. In that English periodical literature of the eighteenth century, the work of Steele, Addison, Pope, and Johnson, in which the native anti-vivisectionism finds its seed-bed, the denunciation of "pride" takes the form of satire directed against the "virtuosi," Fellows of the Royal Society and others, who were devoted to scientific pursuits. More and more this satire is mingled with heart-felt indignation at the experiments performed by physicians and surgeons.⁵⁰ It is one of the paradoxes of the story that later anti-vivisectionists made much of "species difference" in censuring the results of animal research. On the other hand, Darwin brought fresh material for argument along the old lines of the near kinship of man and beast. In such disputes one must not look for perfect consistency.

Theriophily, Cartesianism, and anti-Cartesianism, the principle of plenitude and the law of continuity, the humbling of man's generic "pride"-all these combined in producing a changed intellectual and religious atmosphere, in which, no doubt, still other elements may be discerned. The old objection to the abuse of brutes—that it prepares the way for cruelty to man-the objection which had largely sufficed in antiquity, which had satisfied Sir Thomas More, and which was prominent in the writings of Montaigne, did not disappear;⁵¹ but it no longer seemed enough. The time had come when Schopenhauer could reproach Kant for basing the duty of humanity to animals merely upon this alleged tendency of cruelty to enlarge its domain from beast to man, instead of treating animals as, in their way, ends in themselves.⁵² Animals were soon to be commonly regarded as morally distinct from man, themselves their vindication.

An argument developed from John Locke was that if animals feel-and obviously they do-they must have ideas. If they are rational, then it is possible, by a chain of reasoning already indicated, to grant them immortal souls. Condillac and Bonnet, both indebted to Locke, were leaders among anti-Cartesians. Bonnet, alone among the thinkers investigated by Helen Hastings in her study of Man and Beast in French Thought of the Eigh-

⁵⁰ Addison, Spectator 120, tells a venerable story about a bitch subjected to experi-[∞] Addison, Spectator 120, tells a venerable story about a bitch subjected to experi-mentation in the presence of her young. The same story may be found in Voltaire, Bonnet, Delisle de Sales and Jacques Delille; cf. Hastings, Helen, Man and beast in French thought of the eighteenth century, vol. XXVIII of The Johns Hopkins Studies in Romance Literatures and Languages, Baltimore, 1936, 270. Most interesting of the English essays is Johnson's Idler 17 (5 August 1758) but the argument differs little from Addison's. Harwood, op. cit., 112, gives an early example of the same kind from Mrs. Centlivre's play, "The Basset-Table," 1705. ¹⁰ Stevenson, Lloyd G. On the supposed exclusion of butchers and surgeons from jury duty. J. Hist. Med., 1954, 9, 235-37. ¹⁰ Die Grundlegung d. Moral. 8, E.T., 94; cited by Hastings Rashdall. The theory of good and evil. Oxford. 1907. J. 214 n.

good and evil, Oxford, 1907, I, 214 n.

teenth Century, reached this extreme position. He alone believed that brutes have immortal souls.⁵⁸ Others, however, went part way, and Miss Hastings has described the growth of anti-vivisectionist sentiment in the French literature of the period. It never reached the proportions of a real "movement," despite the participation of such eminent writers as Voltaire, but it was clear and unmistakable. The place of Rousseau in this development has been discussed by a number of philosophers and historians, Professor Babbitt among others,⁵⁴ and seems to be based in part on somewhat different considerations.

In France, Bonnet stood alone, or almost alone, in his belief in brute immortality. What of England? Although Pope has been quoted above in the opposite sense, one of his recorded conversations reveals him as no way disinclined to accept this view.⁵⁵ Bishop Butler, writing in 1736 of the immortality of the human soul, was momentarily halted by the complaint "that these observations are equally applicable to brutes." To this objection -Then brutes may come to rational and moral nature-he replied that they May, but need not, and that Our ignorance regarding them [is] no bar to the argument as it relates to man. His editor, W. E. Gladstone, put the position very well in a note: "Disclaiming any positive doctrine of a rational and moral nature for brutes, Butler stops short of disclaiming the argument for their immortality."50 Others, however, proceeded less cautiously. In 1742 John Hildrop published his Free Thoughts upon the Brute Creation, said to be an attempt to prove that the lower animals have souls in a state of degradation consequent upon the fall of man.⁵⁷ In 1749 the famous David Hartley, a philosopher who influenced Coleridge, encountered the same objection to his claims for belief in human immortality that had met Bishop Butler. "To this we may answer, that the future existence of brutes cannot be disproved by any arguments, as far as yet appears. . . . "" In 1757 Soame Jenyns declared roundly:

 ⁵⁶ Hastings, op. cit., 56-57.
⁵⁶ Babbitt, Irving. Rousseau and romanticism, Meridian ed., New York, 1955.
⁵⁶ Sitwell, Edith. Alexander Pope, Penguin, 1948, 88.
⁵⁶ The works of Joseph Butler, D.C.L., sometime Lord Bishop of Durham, ed. W. E.
⁵⁶ The Works of Joseph Butler, D.C.L., (Perior's Analogy L i 21, 22)

The works of Joseph Butler, D.C.L., sometime Lord Bishop of Durham, ed. W. E. Gladstone, Oxford, 1897, I, 32-33, 33 n. 1. (Butler's Analogy, I, i. 21, 22.)
Dict. Nat. Biog., sub nomine, Hildrop. I have not seen a copy of Hildrop's book. Cf. Hastings, op. cit., 43-44.
Hartley, David. Observations on man, his fame, his duty and his expectations, London, 1791, 3 vols., II, 391. (First edition, 1749). In the full context, Hartley's position resembles Butler's rather closely. Cf., however, I, 413: "... though I suppose with Descartes that their [animals'] motions are conducted by mere mechanism; yet I do not suppose them to be destitute of perception, but that they have this in a manner explorence to they where the large in us: and that it is subjected to the same mechanism. analogous to that which takes place in us; and that it is subjected to the same mechan-ical laws as the motions." Also, I, 415: "We seem to be in the place of God to them, to be his viceregents, and empowered to receive homage from them in his name. And we are obliged by the same tenure to be their guardians and benefactors."

The certainty of a future state, in which we, and indeed all Creatures endued with sensation, shall some how or other exist, seems (if all our notions of Justice are not erroneous) as demonstrable as the Justice of their Creator; for if he is just, all such Creatures must have their account of happiness and misery somewhere adjusted with equity...⁵⁰

In 1766, Capel Berrow, who believed that "the souls of men and beasts are, in their nature, intrinsically the same,"⁶⁰ and who developed a theory of metempsychosis, posed a series of rhetorical questions:

Shall one being be created, even under the bare possibility of being made miserable, solely for the use or pleasure of another? Lord, what is man? or, rather, what are not brutes? Are *they* not, let me ask, souls, labouring under a severer stroke of justice than is the lot of man, from having contracted an heavier load of pre-existent guilt?⁴¹

Richard Dean published his *Essay on the Future Life of Brutes* in 1767. He expected future compensation for the sufferings of animals and felt that our Ideas of the Attributes of God seem necessarily to point out a Continuation of that mighty Chain of living Beings, which is the Astonishment of all contemplative Minds. *Must* there not be a huge Chasm, and a vast Defect in the Universe, if all Nature is to be radically destroyed below Man?⁶⁶

When David Hume came to deal with Bishop Butler's problem, though in a very different spirit, an anonymous editor of 1783 professed himself astounded:

Whoever, yet, of all the assertors of the soul's immortality, presumed to make a monopoly of this great privilege to the human race? Who can tell what another state of existence may be, or whether every other species of animals may not possess principles as immortal as the mind of man?⁶⁶

Of the believers in animal immortality thus far mentioned, all were comparatively obscure to popular notice: the chief point to be stressed is their number. But when this still more or less novel doctrine was espoused

⁵⁹ Jenyns, Soame. A free inquiry into the nature and origin of evil. London, 1757, 73-77. Jenyns was attracted by metempsychosis: 75-77. Also, 69: "The superiority of Man to . . . other terrestrial animals is as inconsiderable, in proportion to the immense plan of universal Existence, as the difference of climate between the north and south end of the paper I now write upon, with regard to the heat and distance of the Sun."

⁶⁰ Berrow, Capel. A lapse of human souls in a state of pre-existence: the only original sin, and the ground work of the gospel dispensation. London, 1766, 42 n.

^{e1} Ibid., 109 n-110 n.

^{es} Dean, Richard. An essay on the future life of brutes, introduced with observations upon evil, its nature and origin, Manchester, 1767, 2 vols., II, 115-116.

^{*} Essays on suicide, and the immortality of the soul, ascribed to . . . David Hume. . . . London, 1783, 57. On the story of this work and the unauthorized editions, see E. C. Mossner, Hume's Four dissertations: an essay in biography and bibliography. Modern Philology, 1950, 48, 37-57.

by John Wesley, it almost certainly began its penetration into wider reaches of society. Wesley's view of the matter may be seen in a characteristically forthright sermon, "The General Deliverance."⁴⁴ The brute creation, he asserted, will not always remain in its present deplorable condition.

While "the whole creation groaneth together," (whether men attend or not,) their groans are not dispersed in idle air, but enter into the ears of Him that made them. While his creatures "travail together in pain," he knoweth all their pain, and is bringing them nearer and nearer to the birth which shall be accomplished in its season . . . They "shall be delivered from the bondage of corruption, into glorious liberty"—even a measure, according as they are capable—of "the liberty of the children of God."

The promised blessings—that God shall wipe away all tears, that there shall be no more death, neither sorrow nor crying, neither shall there be any more pain—will fall "not only on the children of men; there is no such restriction in the text; but on every creature according to its capacity." When all things shall be made new, then the prophecy of Isaiah shall be fulfilled, the wolf shall dwell with the lamb and the lion shall eat straw like the cx. All the evil consequences of the Fall shall be reversed. The whole brute creation shall not only be restored to its primordial beauty, vigor, intelligence, and good will, but shall attain "to a far higher degree of each than they ever enjoyed."

As a recompense for what they once suffered, while under the "bondage of corruption," when God has "renewed the face of the earth," and their corruptible body has put on incorruption, they shall enjoy happiness suited to their state, without alloy, without interruption, and without end.⁶⁵

After Wesley's death, Benjamin Rush heard a group of Methodist ministers, who were unacquainted with the sermon discussed above, conversing about Wesley's reported belief, near the end of his ministry, in final restitution and in the immortality of brutes.⁶⁶ The coupling of the two doctrines was in this case no doubt accidental. Nevertheless, Arminianism, final restitution, and animal immortality are all doctrines which interpret, in one way or another, the saying that "His mercy is over all His works." All proclaim

⁴⁴ The works of the Rev. John Wesley, A.M., London, 1840, VI, 226-237; cf. also "God's approbation of His works," 193 ff. and "The new creation," 271 ff.

⁶⁵ According to Tyerman, Wesley wrote a sermon on "The brute creation" in 1781, and published it the following year, in which he propounded his doctrine that the lower animals will live again in the exalted state of being once enjoyed in Eden. L. Tyerman, *The life and times of the Rev. John Wesley, M.A., founder of the methodists*, New York, 1872, III, 347, with reference to the Methodist Magazine, 1782, 69. I have not examined this sermon to see if it differs from "The general deliverance."

⁶⁶ Corner, Geo. W., ed. The autobiography of Benjamin Rush, Princeton, 1948, 261.

the mercy that is great above the heavens, enduring forever, and although they are of course not inseparable, surely it is in fact no accident when they are found in association.

Dr. T. I. M. Forster, who has been mentioned above, cherished a belief in universal immortality, including that of animals. His acceptance of certain relevant ideas derived from Oriental sources was doubtless conditioned by his family background and was probably not decisive in itself. Modern theosophy, however, gave a wider credence to similar ideas, drawn chiefly from India.⁶⁷ In 1824 Forster's co-worker, Lewis Gompertz, issued a work called *Moral Inquiries on the Situation of Man and Brutes*, in which he set forth as a "theorem" that "Reason would lead us to suppose, if Man should exist in a future state, that brutes do also."⁶⁶ In the same year Peter Buchan published *Scriptural & Philosophical Arguments; or Cogent Proofs from Reason & Revelation that Brutes have Souls; and that their Souls are Immortal.*

And so the story unfolds throughout the nineteenth century. Ralph Fletcher, a Gloucester surgeon, in his *Notes on Cruelty to Animals* (1846) mentions the view

which refers our innocent and inferior fellow-creatures ultimately to the justice and protection of their Maker for compensation, and is certainly consistent with His mighty and illimitable power . . . How noble is the prospect it unfolds, how soothing and cheering the belief, that the humblest atom of sentient being . . . will not go unrewarded by the great Master of Life 1⁶⁰

Though he refused to commit himself on this point definitely, the notion clearly attracted him. In 1875, George Richard Jesse, Honorary Secretary of the Society for the Abolition of Vivisection, told the Royal Commis-

⁶⁷ Older doctrines stemming from oriental religious beliefs and originally transmitted to the West through the literature of classical antiquity are most easily discerned in the history of vegetarianism. Cf. Smith, John. Fruits and farinacea the proper food of man, ed. from the second London ed. by R. T. Trall, M.D., New York, 1868 (American Preface dated 1854). Bonnejoy, Ernest. Le végétarianisme et le régime végétarien rationnel, Paris, 1891. Gharpure, N. K. Tierschutz, Vegetarismus und Konfession, München, 1935. Pythagoras, Iamblicus, Porphyry, Ovid and Plutarch all play parts in the story. Leading English vegetarians were Thomas Tryon (1634-1703) the seventeenth-century "Pythagorean," and Joseph Ritson, author of an Essay on abstinence from animal food (1802) which shows the influence of Rousseau.

⁶⁸ Gompertz, Lewis. Moral inquiries on the situation of man and of brutes; on the crime of committing cruelty on brutes, and of sacrificing them to the purposes of man; with further reflections . . . , London, 1824, 61-62. This book gives descriptions of mechanical contrivances designed to save the pain and labor of horses. Gompertz wrote (against) Surgical experiments on living animals. Lancet, 1838-39, I, 357.

⁶⁰ Fletcher, R. A few notes on cruelty to animals; on the inadequacy of penal law; on general hospitals for animals . . . , London, 1846, 6.

sioners, "You hear some people say that animals have not minds; other deny them immortality, though the latter is certainly what no man can know."" Frances Power Cobbe, Secretary of the Victoria Street Society and the ablest of the anti-vivisection leaders, had no such hesitation in affirming her views. Year in and year out, in pamphlet after pamphlet and book after book, she avowed her passionate belief that animals will share the Hereafter. George Macdonald, the popular British novelist, wrote a book, Paul Faber, Surgeon, about a medical man who was an anti-vivisectionist. This novel, appearing in 1879, includes a sermon which was preached by a clerical friend of Faber's soon after our hero had endeared himself to all right-thinking people, including the heroine, by throwing his assistant down the surgery steps for experimenting on a dog. The admiring curate declared in his sermon that animals "need and have the salvation of Christ as well as we," whereas "that the Bible gives any ground for the general fancy that at death an animal ceases to exist, is but the merest dullest assumption."ⁿ

Frederic Harrison, who thought man's immaterial soul "the one feeble residuum" of a "huge mountain of figment" relating to anima, might ask sarcastically: "If a mother cannot love her child-merely qua human organism—unless her love be a manifestation of an eternal soul, how can a cat love her kittens-merely qua feline organism-without an immaterial principle, or soul?"" But Lord Selborne, writing about animals in all seriousness, considered that "arguments founded on observation and comparison (though not on individual consciousness), more or less similar to those which apply to man, tend to show that there is something distinct from and more than, the body."" And although he denied to animals any "sign of discourse, of reason, of morality, or of the knowledge of good and evil," yet he thought these points worth careful discussion. In the 'seventies and 'eighties of the nineteenth century, men who were preoccupied with the question of immortality were insensibly led through a series of arguments already familiar to the seventeenth century; some, like Harrison, threw over man and cat together; but others immortalized cat in order to save alive the soul of man.

⁷⁰ Report (n. 4 above) p. 272, sect. 5564.

¹¹ Macdonald, George. Paul Faber, surgeon. London, 1879, 226-27. Cf. *ibid.*, 511, where Macdonald asserts that "they are God's creatures, God bless them! and if not exactly human, are, I think, something more than humanish."

⁷⁸ Harrison, Frederic. The soul and future life. The Nineteenth Century, 1877, 1, 628.

⁷⁸ Selborne, in A modern 'symposium': the soul and future life. The Nineteenth Century, 1877, 2, 499.

In 1854 Jameson complained that "The primitive Christians, by laying so much stress upon a future life in contradistinction to this life, and placing the lower creatures out of the pale of hope, placed them at the same time out of the pale of sympathy, and thus laid the foundation for . . . utter disregard of animals in the light of fellow creatures."" It is certainly true, at any rate, that when English moralists of the eighteenth century saw fit to include many of the lower creatures within "the pale of hope," they laid one foundation of that tender solicitude for animals which has consistently viewed them as brothers of man and children of God. Interest in the Animal Kingdom is not merely strengthened, it is charged with fierce and mystical intensity when combined with pathetic belief in the Animal Kingdom Come. The "Hymn to Rover" of Sarah Binks may be a joke, but Robert Southey wrote a very similar poem in absolute earnest. One need not visit pet cemeteries and read the hopeful epitaphs of dogs and cats to realize that such belief is common today: memorial notices in metropolitan newspapers provide ample evidence that it is so.

Of all particular doctrines relating to animals, some form of belief in their immortality is certainly the most important in accounting for the animal cult. Almost equally important, in my opinion, has been the mere involvement in that tangle of theological problems from which this belief has offered a welcome escape. No doubt the escapees have formed the nucleus of the cult. But what of those who were trapped in the labyrinth? Dr. Thomas Arnold of Rugby declared: "The whole subject of the brute creation is to me one of such painful mystery that I dare not approach it." Anxiety and indecision have not always appeared in this acute and explicit form, but neither long search nor close analysis are needed to find them on many another page. Not the most impeccable faith, not the most flawless dialectic can produce more bitterness, or deal more damnation round the land, than such tortuous and resentful indecision when forced to the issue. Arnold clearly wanted some sort of "justice" for the brute creation. A man of this stamp who is cornered, and who has to make good the shortcomings of the deity in the article of justice, may be as dangerous as the fully armed doctrinal zealot. The lack of entire intellectual conviction may even be compensated by sheer vehemence. Anxious involvement in the Great Animal Question was moreover sure to lead, if only by passive and permissive stages, to a termination (as distinguished from a conclusion) which would favour the voiceless, pathetic "creatures."

⁷⁴ Jameson, A. Commonplace book of thoughts, memories and fancies, London, 1854, 209.

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In the roster of Britain's glories, its various humanitarian movements must certainly be given a high place, and of these the movement for the humane treatment of animals is one; anti-vivisectionist activity is obviously, then, the result of heedless excess in a pleasant national virtue. If there be such a thing as "British character," and if this character admit defects, then a certain silliness about animals must be included in the number; anti-vivisectionist activity is then obviously part and parcel of a remarkable national vice. Whichever way one regards it, the story cannot be told without some reference to the general development of love for animals, even in the absence of specific anti-vivisectionist feeling.

I have made it abundantly plain that I consider the eighteenth-century Revival to hold the key, not so much to anti-vivisectionism as to the antivivisection *movement* in Great Britain. It is not insignificant that a new revivalism, beginning in Ulster, swept through the British Isles for several years after 1859; nor that 1873, the very eve of the greatest anti-vivisection battle, was the year of Moody and Sankey.

This explanation is unlikely to surprise anyone. All humanitarian endeavours have been explained in this way long since, and Dr. Bready has reduced the explanation to a formula. In a book entitled *Before and After Wesley* he has tried to show that all before was darkness and that afterward, in every department of English life, the Wesleyan gospel shone, and darkness departed from the face of the earth,⁷⁵ which is not, perhaps, the very best example of British understatement. The view seems to merit most respectful attention, however, provided one does not restrict the field entirely to Methodists and Evangelicals. It is well to remember that of the four chief nonconformist communions, three are indigenous in England. "In the long run," said Lord Palmerston, "English politics will follow the consciences of the Dissenters."

Religion alone is of course insufficient to account for anti-vivisectionism. Species difference and reactive error once appeared to many agnostic Continental scientists to be material objections to animal experimentation. The shortcomings of British popular and general education, for so long exclusively literary, with a seasoning of mathematics; the long continuance of British xenophobia; the peculiar type of sentimentality associated with the Man of Feeling; the increasing influence of women in society, culminating

⁷⁵ Bready, J. Wesley. England before and after Wesley: The evangelical revival and social reform, London, 1938. Among many better books of the same kind, I mention this as representing the most extreme position.

in the feminist movement—these and several lesser constituents may be separated from the mixture.

More important, the philosophical groundwork of the theme demands closer attention. Shaftesbury's benevolent doctrines, unmentioned above, have been confidently described as forming the whole basis of British animal sentiment." In John Locke, first of all, and again in the transition from Locke to Hume, much of the story must be sought.^{π} Horace Walpole hated the Revivalists; his great tenderness for animals, which the Methodists shared-thereby mitigating the harshness of his judgment of Methodismhad been drawn from other fountains. Revealing figures of speech, of which Victorian examples have been given-evidence of particular interest because incidental and incontinent—may be found quite early, for example in the writings of Edmund Burke,78 where there is little reason to suspect Revivalist influence. And yet France, which had a sufficient philosophical groundwork for anti-vivisectionism, never developed a full-blown cult. British philosophy contained elements favorable to the growth of the weed; but it was fostered and brought to luxuriant bloom by British tendencies in religion. The least attractive features of flamboyant evangelicalism at its worst-its unrestrained indulgence in tear-baths of emotion, its love of unreason, even its belief in the constant operation of "special providence"these are also the recurrent features of anti-vivisectionism.

It is a striking fact that Evangelicals, and those of similar faith and sympathy, occupied almost all of the chief positions in the anti-vivisection societies. The movement's most eminent spokesman in Parliament was Shaftesbury. Even Frances Power Cobbe, who abandoned dogmatic Christianity for theism, was reared, she tells us, in "the mild, devout philanthropic Arminianism of the Clapham School" and retained most of the ethical and sentimental results of her Christian upbringing. "I could no

⁷⁸ Cf. Shaftesbury's *Characteristics*, ed. by J. M. Robertson, London, 1900, bk. ii, pt. 2, sec. iii. Cecil A. Moore. Shaftesbury and the ethical poets of England, 1700-1760, P.M.L.A., *n.s. 24*, claims that eighteenth-century humanitarianism owes its origin to the great Deist.

 $^{^{\}pi}$ I am indebted to Professor F. S. C. Northrop for an illuminating discussion of the Locke-Hume transition.

⁷⁸ A letter to a noble lord [on the attacks made upon Burke and his pension, in the House of Lords, by the Duke of Bedford and the Earl of Lauderdale, 1796]: "These philosophers consider men in their [political] experiments no more than they do mice in an air-pump or in a recipient of mephitic gas. Whatever his Grace may think of himself, they look upon him, and everything that belongs to him, with no more regard than they do upon the whiskers of that little long-tailed animal that has been long the game of the grave, demure, insidious, spring-nailed, velvet-pawed, green-eyed philosophers, whether going upon two legs or upon four." This is in the direct tradition of Addison and Johnson.

more have cut them off than I could have leaped off my shadow."" It was the Clapham Sect, of course, that had been chiefly responsible for the abolition of slavery. And when, on February 23, 1807, the Abolition Bill won a tremendous majority in Parliament, members of the Sect repaired to Wilberforce's house in Palace Yard, where Wilberforce was heard to inquire of Thornton, "Well, Henry, what shall we abolish next?""

Like other social and philanthropic enterprises of Victorian England, the anti-vivisection movement owed its inspiration and support to the combination of Anglican Evangelicals and Free Churchmen; but as the national outgrowth of sectarian sentiment, it embraced men of any, every and no faith, men who were not withheld from it by economic or social motives, as many were withheld from enterprises of greater worth. It was more than ecumenical: it was English. It came to be a part of the national culture, so that it was, and is, widely prevalent without reference to specific beliefs about animals. Generations of English children have been fed on the literary pabulum of Sandford and Merton, Black Beauty and the like. From The Oxford Dictionary of Nursery Rhymes may be extracted a history of increasing sentimentality toward our four-footed friends. There is hardly an aspect of British culture which is not in some way relevant to the theme.

That influences so pervasive have not turned every chick and child to a Frances Power Cobbe must be attributed in part to restraining tendencies: common sense, too, forms a part of England's inheritance, and utilitarianism a very important part.⁸¹ But the fact that the seed fell sometimes on favorable soil and sometimes on stony ground must be explained for us in terms of the individual by psychologists. After Freud's Totem and Taboo, with its questionable anthropology, psychologists have offered us very little-and with specific reference to anti-vivisectionism almost nothing.

I began with a set of quotations, of which two, from the spoken testimony of Henry Acland, showed a certain anti-vivisectionist tendency. Acland was by no means unique among British physicians of the nineteenth century; he was not, indeed, an extreme example. In 1843, Etherington, writing in

[&]quot; The life of Frances Power Cobbe by herself. 2 vols. Boston and New York, 1894,

Ine nje of Frances rower coope oy nerself. 2 vols. Boston and New York, 1894, No. 82. Wilberforce, R. I. and S. The life of William Wilberforce. 5 vols. London, 1838, III, 298; quoted by Howse, E. M. Saints in politics: The "Clapham Sect" and the growth of freedom, Toronto, 1952, 64. Thornton replied, quite seriously, "The lottery, t think" think." " The Benthamite philosophy had another side as well. On its humanitarian aspect

see Dicey, A. V. Lectures on the relation between law & public opinion in England during the nineteenth century, London, 1926, 188-89. On the relationship of Benthanism and Evangelicalism, see *ibid.*, 399-409. Dicey states that "in the detestation of cruelty, Benthamite free-thinkers, Whig philanthropists, such as Fox, Tory humanitarians, such as Pitt, and Evangelicals who followed Wilberforce, were substantially at one."

defence of animal experiments, thought a large part of the medical profession among his opponents.³⁰ In 1875 it was still possible to obtain a long list of physicians' signatures on anti-vivisectionist petitions. What is more, no small number of genuine scientists, including Fellows of the Royal Society, showed varying degrees of sympathy with the zoophilic cause.

Let me conclude with a pair of short quotations from the writings of two contemporary British scientists, who must be infinitely surprised to find themselves in agreement. The first is Professor C. A. Coulson, Oxford mathematician and orthodox Christian, who writes that "in many respects the most difficult of the tensions between science and religion are not those between a believing non-scientist and a non-believing scientist; they are the tensions within the mind of one single man, a scientist who is also a believer." Professor J. D. Bernal, London physicist and orthodist Marxist, writes these words about the past: "It was not that Science had to fight an external enemy, the Church; it was that the Church-its dogmas, its whole way of conceiving the universe-was within the scientists themselves."** The large admixture of anti-vivisectionist feeling in British science itself was more important, in the past, than all the lay petitioners, orators and pamphleteers in all the counties of England. The Vivisection Act of 1876 was not the creation of the organized anti-vivisectionists; but neither would it be fair to say that it was the work of a "fifth column" within the ranks of science. This extraordinary measure was the child of philosophy and religion, and Britannia herself stood godmother.

⁸⁸ Etherington, G. F. Vivisection investigated and vindicated, Edinburgh, London and Nottingham, 1842, 24.

⁸⁸ Both quotations are taken from Coulson, C. A. Science and religion: a changing relationship. The Rede Lecture for 1954. Cambridge, 1955, 4.