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The Research Defence Society: Mobilizing the Medical Profession for Materialist Science in the Early-Twentieth Century

At the end of the nineteenth century, medical experimenters were on the defensive. Although the 1876 Act had done nothing to reduce animal use, and Britain's physiologists were confident they could ensure it was 'harmlessly administered' by putting 'effectual pressure upon officials...',¹ it was still more restrictive than the laws of any other European nation, and more intrusive than any of them wanted: one American observer thought it 'significantly handicapped the teaching (if not the practice) of British physiology'.² Anti-vivisectionists naturally claimed the Act did not go far enough, and used initiatives such as anti-vivisection hospitals and pamphlet wars to raise doubts over whether experiments on animals were necessary, and fears that they would inevitably lead on to human experimentation.

The nineteenth-century medical profession had been able to extract some positive publicity from the bitter dispute over vivisection by presenting it as a difficult and demanding task that required great fortitude and commitment to science. Flouting conventional sensibilities had, after all, served medics well in the recent past, when body snatching scandals had introduced the trope of the 'mad' scientist, a heroic figure who transgressed moral boundaries not for personal gain but to win

valuable knowledge for the benefit of mankind. The public were willing to be persuaded that the anatomist's noble ends might justify the base and sometimes illegal means used to obtain corpses, though their response was strangely ambivalent: angry crowds called for body-snatchers to be hanged, while anatomy shows became so popular that the subject 'turned to gold'.³ The furore certainly made it clear to everyone that, after the Anatomy Act, doctors enjoyed privileged access to a body (of course) of knowledge that was denied to laymen, who had neither the opportunity nor the stamina to attend the dissections necessary to obtain it.

In the late-nineteenth century, vivisection assumed a similar function, and vivisectionists, like anatomists before them, enjoyed an ambiguous reputation as both perpetrators of atrocities and pioneers of science. In the twentieth century, however, when vivisection was set up as one of the pillars of experimental medicine, it could hardly remain the prerogative of a few eccentric, taboo-breaking innovators. It had to be normalized within a medical culture that based its intellectual and moral authority on the intimate relationship between professional knowledge and laboratory experimentation.

An obvious obstacle to this was the steady growth of anti-vivisection organizations, which kept up the pressure on experimenters by publicly questioning their judgement in using animals to study human disease.⁴ According to Tansey, it was the antis persistence that led to the setting up of another Royal Commission in 1906.⁵ By this time, the use of laboratory animals was far greater than when the first commission had reported 30 years earlier: the nationally-funded Imperial Cancer Research Fund (ICRF) alone, founded in 1902, was already performing 8,600 experiments a year.⁶ Although these were all carried out in accordance with the 1876 Act, large increases of this kind would probably not have commanded public support, and so vivisectionists tended not to publicise them. A new anti-vivisection strategy arose of publishing details of how many experiments were being performed in the hope of shaming vivisectionists into stopping: the *Anti-Vivisection Review* called this publicity 'The Light dreaded by all Vivisectors'.⁷

The second Royal Commission offered an important opportunity for experimenters to launch a 'counter-attack' in the propaganda

war. The medical community initially coordinated their response through the Association for the Advancement of Medical Research (AAMR), a working group that had been formed in the wake of the Cruelty to Animals Act, to advise the Home Office on granting licenses. Concerned that the Commission planned to tighten up the regulations, a number of leading physiologists decided to found a new group, the Research Defence Society (RDS), whose inaugural meeting on 27 January 1908 in London's Harley Street saw Lord Cromer elected as President and Stephen Paget (1855–1926) as Secretary. It consisted of a small but distinguished all-male group of physiologists, most of whom had links with UCL, which, thanks to the Brown Dog riots, was the best-known centre for animal experimentation in the country. Among those present at the first meeting were Professor Cushny,⁸ Sir Victor Horsley (1857–1916), Dr Charles Edward Beevor (1854–1908), Dr Leonard Hill (1866–1952), Lord Justice Fletcher Moulton (1844–1921) and Sydney Holland. The RDS received a start-up grant of £185 jointly from the Physiological Society (another pro-vivisection group, founded in 1876 'for mutual benefit and protection') and Professor Ernest Starling's (1866–1927) UCL working group, which was busy preparing evidence for the Commission.⁹

The Earl of Cromer, a diplomat and banker, had very little to do with the day to day running of the Society. That task fell to Paget, who was also Secretary of the AAMR, many of whose members joined the fledgling RDS, the two organizations eventually amalgamating in 1917.¹⁰ Paget, whose role was somewhat akin to that of Stephen Coleridge in the anti-vivisection movement, was not himself a vivisectionist and had no connection with UCL. He was medically qualified, but had given up practice altogether in 1910 to devote his professional energies to justifying vivisection, writing frequent articles and letters, and lecturing widely on the topic, despite his worsening health.¹¹

Most of the other RDS members were active researchers. Sir Victor Horsley, FRS, who had trained at UCL before becoming Professor of Surgery there, was a man of strong social principles—a temperance reformer and supporter of women's suffrage—and was particularly noted for his kindness to patients. In writings such as 'The Morality of Vivisection', he argued that excessive feeling for animals was displacing

proper concern for humans. His own concern for humanity led him to vivisect over 3000 animals (his work on gunshot wounds in dogs involved shooting them in the head), a record hotly criticised in the correspondence columns of *The Times*. He had every reason to resent anti-vivisectionists, having been professor at the notorious Brown Institute in London's Vauxhall (a post previously held by Burdon-Sanderson, author of the vivisectors' handbook), an institution the BUAV and others had strenuously, though unsuccessfully, campaigned to close.¹² It was Horsley who had helped persuade his colleague Bayliss to bring the so-called 'Brown Dog' libel action against Stephen Coleridge in 1903 for reading out an extract from *The Shambles of Science* at a public meeting—UCL men were particularly riled by the chapter entitled 'Fun', in which Lind of Hageby described their 'jokes and laughter' during experiments.

Despite being a dog owner himself (a photograph shows him holding an understandably nervous looking Jack Russell), Horsley was spokesman for the Society for the Prevention of Hydrophobia, and a leading advocate of compulsory dog muzzling—the Society's answer to Britain's periodic outbreaks of 'hydrophobia'. These epidemics took the form of a rash of press reports about 'mad' dogs, at least some of which were probably suffering from common canine diseases such as distemper, or simply misbehaving, rather than carrying the dreaded disease.¹³ How much genuine rabies there was in early-twentieth century Britain remains an unanswered question, but scare tactics from the Society for the Prevention of Hydrophobia, such as recommending that all dogs had to be kept muzzled in public in order to prevent a national rabies epidemic, were certainly expedient for vivisectionists, for whom unwelcome and unwanted strays were an easy source of low cost experimental subjects.¹⁴

Another two UCL men at the inaugural RDS meeting were Leonard Erskine Hill, a physiologist working on decompression sickness, and who held a high view of research ('the path which saves the millions when found'),¹⁵ and Beevor, an associate of Horsley.¹⁶ An important non-medical supporter was Moulton, a barrister who gave evidence to the Royal Commission; he 'preferred not to be a member', in case this was thought to conflict with his legal work, but after he became an Appeal Court judge in 1912, and the first chairman of the Medical Research Council (MRC) the following year, he used his influence to help the RDS 'again and again'.¹⁷

The second Royal Commission's report was a foregone conclusion given its skewed composition: naturally enough, there were several vivisectors on the panel, but the BUAV's attempt to have Walter Hadwen appointed was rejected on the grounds that as an anti-vivisectionist, he would be biased. Between 1906 and 1912 the commission sifted a large amount of evidence, before unsurprisingly endorsing the status quo. Their major recommendation was the usual one for a public enquiry desirous of seeming to act while in fact doing nothing: they set up a committee to take over the AAMR's role of advising on licensing, which in the BUAV's view made no difference. While the Commission was still pondering the evidence, vivisection had received a boost from the 1911 National Insurance Act, which set aside state (i.e., taxpayers') money to fund medical research.¹⁸ Two years later, the Medical Research Committee and Advisory Council (later the MRC) was formed to control how the money was allocated.

The Early Years

Membership of the RDS was by invitation only and within a month of its foundation almost three hundred experimenters had joined, only six of those approached having declined. The annual subscription was 5 s and life membership £10: since one would have had to live another 40 years for life membership to work out cheaper, the Society apparently had young experimenters in its sights, but as there are no extant membership lists, we cannot be sure who joined. The secrecy was not because members would have faced any direct threat—violence against vivisectionists was unknown until the 1970s—but because being known as a vivisectionist might have deterred some donors, and patients. After only a few months there were over a thousand members, including eighty-four women, plus many hundreds of associates, mostly medical students, who paid half a crown.¹⁹

The RDS quickly acquired a list of distinguished vice-presidents to rival those of the anti-vivisection societies: these included Elizabeth Garrett Anderson, Lord Curzon, the Duke of Devonshire, Edward Elgar, M.R. James, Rudyard Kipling, Ray Lankester, William Osler, and Henry Wellcome.²⁰ To the dismay of the anti-vivisection camp,

sixteen Anglican bishops signed up, perhaps desirous of demonstrating, as the Bishop of Edinburgh had stressed at a church congress 20 years earlier, that the Church was not 'anti-science'.²¹ RDS meetings were, and remained, ticket only, despite being described as 'public', but interested laypeople could, and did, attend; at a meeting of the Kensington branch, more than half the audience were women.²²

The initial strategy was to hold educational meetings and provide speakers for public debates. The society kept itself abreast of the times and locations of anti-vivisection meetings, and accepted 'challenges' to send along a speaker. These were competitive debates, with a vote taken at the end, and the RDS minutes record that they 'won' in Winchester and Bow, but lost in Bath and Oxford. However engaging these sessions were to those present, the small numbers voting—usually less than a hundred—suggests they did not have a very wide appeal. Recognising that competitive debating was unlikely to achieve its objects, the RDS decided not to accept any further invitations from anti-vivisection societies, though they continued to provide public speakers into the 1920s.²³

Both the RDS and their opponents were, however, willing to continue the argument at a less intellectual level. In January 1909, the committee was shown a circular, signed 'M. Cowan', outlining 'a plan of prayer for the sudden death of this or that person making experiments on animals'. This echo of Anna Kingsford's notorious campaign of psychic assassination, which she claimed had brought about the deaths of Claude Bernard and Paul Bert, was the sort of anti-vivisection excess that the RDS quite reasonably thought would help their cause. Unfortunately, their own tactics were scarcely more subtle; they accused Lord Llangattock of being 'addicted' to stag hunting, a libel that Dr Morgan Jones for the RDS was foolish enough to try to defend, leaving the Society with no choice but to publish an apology in order to avoid being sued, though Paget churlishly limited it to 'a purely formal expression of regret'.²⁴

The task of the RDS was made easier by the anti-vivisectionists' inherent disunity. A major schism had occurred in 1898 when the National Anti-Vivisection Society passed the following resolution by 29 votes to 23:

The Council affirms that, while the demand for the total abolition of vivisection will ever remain the ultimate object of the National Anti-Vivisection Society, the Society is not thereby precluded from making efforts in Parliament for lesser measures, having for its object the saving of animals from scientific torture.²⁵

As a result, Frances Power Cobbe had set up the British Union for the Abolition of Vivisection, which demanded a total and immediate ban on all animal experiments, while the NAVS, under Stephen Coleridge's leadership, was prepared to accept lesser measures in the interim. The choice between principled total abolition and pragmatic gradualism was to prove an enduring source of tension for the movement.

In 1909, two rival international anti-vivisection congresses were held in England, one organised by Lizzy Lind af Hageby's gradualist Animal Defence and Anti-Vivisection Society, and the other by the World League Against Vivisection, which was committed to total abolition. While the latter's position was perhaps logically more coherent (if vivisection were morally wrong, there could be no excuse for tolerating it), it seemed to the pragmatists that those demanding 'all or nothing' were liable to end up with nothing. For the World League, however, total abolition seemed achievable, not least because they had the support of several prominent Labour MPs, whose party was a rising force in parliament.²⁶

When engaged in debate, the RDS favoured the time-honoured utilitarian position that vivisection saves human lives, which they backed up by providing facts about the important discoveries that Pasteur and other famous medical scientists had made through animal research. It could be difficult for their some of their speakers to appreciate why the audience remained unconvinced by such powerful evidence. In 1910, the distinguished astronomer Sir David Gill (1843–1914), speaking for the Society, was involved in the following exchange:

Gill: 'Let any mother whose child is suffering from that dangerous disease diphtheria be asked how many dogs' lives she would give for the life of her child'

A lady in the audience: 'None'

Gill: 'God help humanity! (Applause and a few hisses)
One lady says she would not give one'
Lady: 'Not one'.²⁷

The RDS undertook direct action against anti-vivisectionists with more success. They asked railway companies not to display anti-vivisection posters on their stations, with the result that the District Railway stopped accepting them, while the canny Great Western continued to take the anti-vivisectionists' money but placed the posters in obscure positions.²⁸ The RDS also persuaded railway bookstalls not to sell anti-vivisection pamphlets, asked the publisher Sir Frederick Macmillan to drop anti-vivisection publications from his list, convinced the Postmaster General to ban anti-vivisection advertisements in post offices, and induced the organisers of Cruft's dog show to stop hosting a BUAV stall there.²⁹ They even planned to break up a 'monster procession' in the anti-vivisectionists' home territory of South London, until they discovered there would be 'a large contingent of Battersea roughs, to protect the banners from medical students...'.³⁰

A common means of promoting the anti-vivisection message was to rent display space in a shop window and hand out leaflets outside. The RDS hired men with sandwich boards to March up and down in front of the ADAVS's 'anti-vivisection shop' in London's bustling Piccadilly and hand out leaflets of their own, a tactic that was successful insofar as the shop closed after a year, though it probably did little to spread a positive message about research. Passers-by found these aggressive pamphleteers, who came to blows on one occasion, a nuisance, and Westminster Council complained about the resulting litter of leaflets that beleaguered pedestrians threw away as soon as they could: a salutary reminder that most people had no interest in the vivisection question one way or the other.³¹ In 1910, the BUAV opened shops in Wimbledon, Newcastle, Southport, Liverpool and Worcester, and the minutes of the RDS note that '[e]ach of these shops had been duly besieged with the leaflets of the Research Defence Society, and had been closed'. The contents of their leaflets was as disingenuous as those of the antis: when George Robbins of the Anti-Vivisection Hospital wrote

to Paget complaining about a pamphlet entitled 'Fighting the Invisible', Paget admitted that it was untrue to state that animals were always killed immediately after experimentation, because that 'would defeat the objects of enquiry', but said the RDS was not responsible for the contents of the pamphlets they distributed.³²

The fuss stirred up by the second Royal Commission and the ensuing pamphlet wars died down with the outbreak of the First World War. The public had other concerns, and newspapers had little space to report domestic spats. Civilian medical research and education were stepped down as universities focussed on training extra doctors quickly, and many anti-vivisection groups suspended their activities,³³ though their work was not done, as military experiments replaced civil ones. As the conflict escalated into an industrial and technological race to manufacture weapons faster and in greater numbers than the enemy, science was enlisted to come up with new ones: in 1915, the Ministry of Munitions acquired six thousand acres in Wiltshire that became the War Department Experimental Ground, better known as Porton Down, and commandeered a nearby farm to breed animals for the chemical and other weapons tests that were set to take place there.³⁴

Wartime statistics were presented in such a way as to obscure the large increase in the number of animals being used; for example, in 1916, the *Lancet* noted that the latest Home Office return showed 2771 experiments had been performed the previous year, 'other than those of the nature of simple inoculations, hypodermic injections, or similar proceedings...'.³⁵ While this sounded reasonable enough, these 'simple' injections included inoculations with tuberculosis, anthrax, rabies and bubonic plague, and there were many thousands of them.³⁶ National newspaper proprietors were bound to keep the government's secrets, and were provided with positive stories about how research on animals was leading to major advances in the fight against disease amongst the troops. The anti-vivisection lobby unfortunately chose to counter what they saw as the government's increasingly authoritarian attitude to medicine by campaigning against compulsory vaccination, with the result that they were denounced in the House of Commons as 'unpatriotic' for trying to stop soldiers from receiving life-saving inoculations.³⁷ Since this could be construed as interfering with the war effort, a crime

under the Defence of the Realm Acts, the anti-vivisection movement found itself effectively boycotted by the press.³⁸

Inter-War Politics

After the war, the RDS claimed that experiments on animals had saved the lives of many wounded men by helping surgeons to understand ‘the violences offered in modern warfare to the human body...’³⁹, and they branded the anti-vivisection movement ‘an enemy of the people’.⁴⁰ The Society resumed its course of blocking anti-vivisection initiatives whenever it could while eschewing open debate, but Paget, whose health was deteriorating, became concerned that, although public opinion was turning in their favour, it would be impossible for them to overcome opponents who had many times more money to spend than they did (in 1921, the RDS’s annual income was under £750—less than one anti-vivisection society was spending on stationery).⁴¹ ‘We cannot follow them everywhere’, he wrote despairingly, painfully aware that many local RDS branches were ‘half-dead’.⁴²

Fortunately for the RDS, the war had sapped support for anti-vivisection also. Appalling though the suffering inflicted upon animals during the conflict had been, it was lost in the shadow of the human tragedy. It was also believed that animal experimentation carried out in secret had helped the war effort. The BUAV made the best of it, asking donors to recall that animals too had served their country by performing military service, but in the post war years many people were poorer, taxation had increased, and there was little money to spare for animal charities. Most of the anti-vivisection movement’s charismatic founders were now dead or aged, and the societies they had founded, like all protestants, had proved fissiparous, and, rather than pooling their resources, tended pursue separate agendas. Consequently, most of the anti-vivisection work undertaken in the inter-war period was uncoordinated, and met with scant success. High-profile researchers such as the UCL physiologists were still subjected to attacks in print, which was how Lizzy Lind af Hageby and Leisa Schartau had begun their campaign at the turn of the century, but perhaps the only new tactic of note

was a 'van campaign' to transport posters and pamphlets to far-flung parts of the country and collect signatures for petitions.⁴³

Within the medical profession, the growing reliance on animal experiments seemed to have gained unstoppable momentum: animal research had come to be regarded as the gold standard and so scientists who wanted their work to be taken seriously by their peers more or less had to use animals. Of the Nobel prizes in physiology or medicine awarded in the hundred years from 1901, only thirteen did not involve research on non-human vertebrates. This pattern was reflected by lesser prize- and grant-giving bodies, and so animal research became linked in the public mind with reports of acclaimed new discoveries, while the details of what actually went on in the privacy of the laboratory were usually glossed over.⁴⁴

There were some attempts by the anti-vivisection lobby to have Porton Down closed, but they came to nothing as the government was keen to continue its research in anticipation of another conflict. Curiosity about this secret establishment led to speculation in the press and questions in parliament, where the answers given only hinted at what might still have been going on there. In May 1923, the Under Secretary for War admitted in the House of Commons that over 700 animals, including 23 monkeys, had been used in 'gas poisoning' experiments the previous year, and the number of animals acknowledged to have been used in such testing continued to rise until 1925, when the Geneva protocol banned chemical warfare.⁴⁵

Ironically, peace initiatives such as the League of Nations, formed in 1920 to prevent future conflicts, tended to lead to more experiments on animals, since improvements in 'modern medicine' were hyped as a means to alleviate the social hardships that led to war.⁴⁶ The post-war conflict in which Europe was now engaged was a war against poverty and disease, and it was being fought with modern, scientific weapons developed in the clinic and laboratory. Pro-vivisection literature made increasing use of this military imagery, with the RDS reporting what had been learned from the 'sacrifice' of laboratory animals in a series of pamphlets entitled *The Fight Against Disease*. Like any war, it needed large sums of money to be raised at a national level: to this end, the British Empire Cancer Campaign was founded in 1923, to supplement the work of the ICRF and MRC, who initially considered it a rival.

The idea that science held the keys to health, prosperity and peace naturally fostered a positive attitude on the part of the public towards laboratory research: at the Efficiency Exhibition in Olympia there were long queues at the Middlesex Hospital stall as people waited to look down the microscopes.⁴⁷ The British experienced nothing like the reaction to laboratory-based work that had been seen in Germany, where a so-called ‘crisis of medicine’ occurred as many ordinary people lost their trust in ‘mechanistic’ medicine and turned instead to heterodox practitioners of alternative medicine, whose treatments seemed more natural and whose methods appeared more patient-centred.⁴⁸ In Germany, vivisection became a symbol of the failure of scientific medicine to respect the ideals of the traditional healer, and the public responded enthusiastically when the rising National Socialist Party adopted an anti-vivisection policy.

In Britain, those parts of society that were most outspoken with regard to vivisection failed to hold the government to account when they were able to, presumably because they felt there were more important issues to vote on. Anyone who had predicted that the government would be forced to ban vivisection once women and the non-landed classes were enfranchised turned out to be badly mistaken.⁴⁹ The first Labour government, formed in 1924, included no fewer than four cabinet ministers—Ramsay Macdonald (1866–1937), Philip Snowden (1864–1937), Arthur Henderson (1863–1935) and J.R. Clynes (1869–1949)—who had been pre-war supporters of the World League Against Vivisection, but all of them failed to put their purported principles into practice now that they were able to do so. Clynes confessed his hypocrisy in the most elegant of phrases, writing that in the matter of vivisection he found it impossible ‘to harmonise his public duties with his private opinion’.⁵⁰

With support for anti-vivisection groups on the wane, the RDS turned its attention to ensuring that the income derived from legacies as wealthy anti-vivisectionists died off was minimised. In a landmark legal case in 1928, the RDS appealed against a legacy of £200,000 being used to set up a trust to fund the Beaumont Animals Benevolent Society.⁵¹ The bequest was as bizarre as it was generous, but the Court of Appeal ruled that its purpose—to create a sanctuary where all kinds of animals could live undisturbed by humans—was not charitable, since the Court

reckoned that this would provide no benefit to the public.⁵² Although this so-called Grove-Grady case was not related to anti-vivisection, the judgement did establish a valuable principle, from the RDS's perspective, that money given *for the benefit of animals alone* could not be considered charity. Had the court decided otherwise, wrote its secretary, it 'would have given us endless trouble',⁵³ as it was, the decision paved the way for a future ruling that anti-vivisection too could not be a charitable cause.

For veterinary hospitals where research on animals took place, Grove-Grady meant that charity must be given for the benefit of the hospital rather than the animals. In 1931, the RDS took legal action against the BUAV on behalf of the Tail Waggers Club, a fundraising scheme for the Royal Veterinary School that the BUAV had tried to block on the grounds that it subsidised animal experimentation. The RDS's action was successful, winning for Captain Hobbs, the only human member of the Tail Waggers, £500 in damages.⁵⁴ The following year, the School found themselves less grateful for principle that charity could not be given solely to help animals when the RDS threatened legal action to prevent them accepting £25,000 from an anti-vivisectionist, though the Society relented after School promised 'that none of the sum be devoted to anti-vivisection propaganda'.⁵⁵

The RDS did not receive government assistance, remaining essentially a private lobby group for vivisectionists. New license holders received a letter inviting them to join, but neither the identities of those who did, nor the total number of members, was made public, though there must have been far fewer than even the smallest anti-vivisection society, and the RDS's annual income was less than a thousand pounds. Considering its modest budget, the influence it was able to exert was impressive. In 1934, the honorary secretary, G.P. Crowd, summarised its principal achievements: the defeat of the Dogs Protection Bill, the defence of University College in the dog stealing case, changing the attitude of the RSPCA to research, blocking the Grove-Grady bequest, and protecting research at the Royal Veterinary School.⁵⁶ A closer examination of the first of these, the long and frustrated progress of the Dogs Protection Bill in its various forms, shows how the RDS was able to influence parliament and collaborate effectively with the BMA and other pro-vivisection groups.

Stopping the Dogs Protection Bill

The Dogs Protection Bill was conceived as a means to break down the vivisectionists' defences at their weakest point, necessarily forgoing the support of total abolitionists (though the BUAV backed it) in the hope of winning a tactical victory on behalf of the species most adept at appealing to human sympathy. The popularity of dogs as domestic companions as well as their usefulness as working animals made their use as experimental subjects seem particularly objectionable; as Lord Dowding put it, 'the dog has no aim in life other than to love and serve humanity', and the relationship between dogs and humans was often assumed, with good reason, to be a special one.⁵⁷ Dogs had had their own anti-cruelty lobby since 1891, when the National Canine Defence League was founded by the breeders of show dogs, to protect dogs from all kinds of cruelty, from vivisection to muzzling.

The advocates of dog-specific anti-vivisection legislation left themselves open to the criticism that they were acting on an irrational, sentimental bias towards a favourite pet, and indeed the positions of both sides in the dogfight were not far removed from hypocrisy. Experimenters pretended there was nothing special about dogs, but then admitted they preferred them because they were particularly cooperative and biddable, even under torture, an admission condemned by anti-vivisectionists as the heartless betrayal of a friend and helper. Dog lovers, however, had little to be proud of; one reason that dogs were such a popular laboratory animal being that they were readily obtainable: Britain was home to a large underclass of strays and mongrels which, though legally protected from vivisection by the 1906 Dogs Act, were, in reality, like pauper cadavers a century before, worthless to all except experimenters, who could easily acquire them for money.

In 1906, when the BUAV sought support for a dogs protection bill (not an entirely novel idea, since a 'Dog Protection Bill' had been contemplated as long ago as the 1840s to prevent the theft of 'fancy dogs' for export),⁵⁸ the public, understandably averse from the idea of anyone experimenting on what they saw as pets, responded enthusiastically, and the BUAV was able to present the Home Secretary with a petition weighing a quarter of a ton, nine miles long, and with over 400,000

signatures.⁵⁹ Although the size and weight of this monster petition were obviously inflated for dramatic effect, it still stands as one of the largest written petitions in English history.

The BUAV had appealed to the public because a similar bill introduced in the House of Commons the previous year had failed to progress.⁶⁰ For those unversed in the labyrinthine complexities of the British parliamentary system, bills receive a nominal 'first reading'—in which the title is read out and the bill is ordered to be printed—followed by a second reading when they are debated and voted on. If they are passed, there follows a committee stage at which amendments are made and voted on, before the bill may proceed, time permitting, to a third reading and another vote. Once a bill has been passed by the Commons, it must then undergo a similar process in the House of Lords, and only when this is finally complete is the bill passed for royal assent, at which point it becomes law. Few private member's bills, i.e., those not sponsored by the government, ever become law, unless the government aids their passage.

The medical profession, through the BMA, responded to the huge petition by releasing a strongly worded manifesto opposing the bill,⁶¹ which suffered the fate of most unsupported bills, reaching its second reading but then running out of parliamentary time. It was reintroduced in 1907 by the radical liberal barrister Ellis Griffith (1860–1926), but met with the same outcome. Sir Frederick (later Lord) Banbury (1850–1936) tried again in 1908, to loud cheers from the backbenches, but despite the support of the fifty or so MPs who were members of the BUAV-sponsored Parliamentary Anti-Vivisection Committee, the bill was blocked by members representing medical and university interests. In 1911, after the BUAV's parliamentary question on the legality of selling dogs for experimentation received an 'evasive and unsatisfactory' answer from the government,⁶² Banbury vowed to reintroduce the dogs bill in every session until it was passed. The bill passed its second reading in 1913, but was 'wrecked' at the committee stage, when it was decided, by thirteen votes to twelve, to amend it to allow experiments performed under anaesthesia,⁶³ thereby, quipped one newspaper, ensuring that the bill was 'painlessly killed'.⁶⁴ Perhaps the most quotable contribution in this debate came from the G.G. Greenwood (1850–1928), a supporter

of the bill, who, when asked by the committee whether he would vivisect a dog to save his own child, replied: 'to save my child, I should, very possibly, be prepared to vivisect the honourable Member who asked [that question], But that would hardly be accepted as proof that I was morally right in so doing'.⁶⁵

The Bill returned again in 1914, to the dismay of the BMA, and 350 physicians and surgeons wrote to *The Times* in protest.⁶⁶ This was sufficient to mobilise enough MPs to block it as, apart from the parliamentary anti-vivisection group, most had no strong opinions on the fate of stray dogs. Accused of being motivated by sentimentality, the anti-vivisection MP Colonel E.S. Sladen said he was 'proud' of being sentimental about dogs, and would welcome 'the advent of sentiment into the house of commons'.⁶⁷

The tenacious Banbury ('a grim old Tory, but he has a very soft heart for a dog') tried again in 1919 and the bill 'slipped through' its second reading in spite of the efforts of the Commons medical committee, who were 'caught napping', and whose best argument seemed to be that the bill was against the national interest, since research on dogs during the war had led to the development of gas masks.⁶⁸ The bill got through to the committee stage but was amended to make it, in the words of the RDS, 'absurd' and then defeated on a three line whip (i.e., the government compelled its MPs to vote against it on pain of expulsion from the party).⁶⁹ It did not help that an 'epidemic' of 'rabies' broke out while the bill was before the house, a coincidence that looked to one newspaper like 'a political dodge' to deprive stray dogs of public sympathy.⁷⁰ *The Times*, which opposed the Bill, took the opportunity to remind readers that the cure for 'this most awful disease' had been discovered by Pasteur's experiments on animals.⁷¹

The medical lobby continued to present vivisection as both essential and innocuous. A deputation from the Royal Society of Medicine told the Home Office that 'in the absence of infection the wounds [of vivisected dogs] were not painful', but it is inconceivable that anyone with medical experience actually believed this; the point was well made by anti-vivisectionists that scientists were never willing to have these 'painless little operations' performed on themselves.⁷² The deputation also appealed to the national interest by claiming that 'success in war or in

industry was bound up in experimental research', which gave the government a political and financial excuse for permitting as many experiments as possible, while making anti-vivisection seem to go against the national interest.

The established church, or at least those in authority within it, sided with the RDS. The (Protestant) Archbishop of Dublin, who was president of the RDS's Dublin branch, complained that the bill would 'retard the advance of medical knowledge and hinder the work of surgeons for the benefit of suffering mankind'. He told an RDS meeting that, compared with human needs, the interests of animals were morally negligible: 'Man has a dignity of his own which he does not share with the lower creatures. He is an "end in himself", as the philosophers say: you cannot say that of any other animal'.⁷³ Pro-vivisection bishops earned the disapproval of some members of their flocks, but their lordships held firm in their views: the Church Anti-Vivisection League told Bishop Frodsham of Queensland that his involvement with the RDS, 'having nothing to do with his sacred office, is a scandal and cause of offence to manifold members of his flock', but the bishop replied that vivisection was a work of mercy to alleviate human suffering,⁷⁴ which his critics thought a poor sort of humanity:

If not a sparrow fillets to the ground,
Without the notice of Almighty God,
What will not be required of those who give
Their sanction and support to such a crime
As vivisection?

Not a throb or groan
Of martyred animals strapped down in torture troughs
(Within those 'cruel habitations' planned by cowards
And human monsters known as lab'r'tries,
Where 'science'—falsely called—holds unchecked sway,
And cruelty un-masked stalks rampant in the midst
Of dumb defenceless victims dazed with fear,
And turning piteous eyes on the mean wretch
Who stands, with Knife upraised, to make the gash
Which is 'to benefit humanity'!)...⁷⁵

If one can penetrate their execrable style, these verses neatly encapsulate the main argument against vivisection: it was inhumane and so could not benefit humanity, or be a path to knowledge, as only the morally ignorant would perform it.

The RDS seldom responded to religious or philosophical arguments, at times seeming genuinely baffled by them, and certainly did not rely on them to defeat the Dogs Protection Bill, arranging instead for their supporters in the House of Commons deliberately to prolong the proceedings so the bill would run out of time, a not uncommon parliamentary tactic.⁷⁶ The Bill, however, showed no signs of going away, and had yet another first reading in 1921.

At a public meeting of the London and Provincial Anti-Vivisection Society, one of its founders, the Irish suffragette Mrs Norah Dacre-Fox (later Norah Elam, 1878–1961), read out twenty letters from Members of Parliament in support of the Bill. As she knew that ‘a large majority of the [female] public were strongly in favour of the measure’, she felt sure it would pass ‘if women made proper use of their new political power’.⁷⁷ There was, however, more power in influence than numbers, and the BMA’s parliamentary subcommittee collaborated with the Commons medical committee to get the bill ‘talked out’ again, this time by the medical MP Francis Fremantle (1872–1943), who was acting ‘on behalf of the [Research Defence] Society’.⁷⁸

To forestall further attempts at legislation, Viscount Knutsford (the philanthropist Sydney Holland) requested that the BMA produce a definitive statement in favour of vivisection and they duly obliged, declaring in a memorandum of 1926 that any interference with it would ‘impede advancement of knowledge’.⁷⁹ The following year, another Dogs Protection Bill, this time backed by the National Canine Defence League, was laid before parliament. By this time, public support had grown stronger, and the petition had a million signatures, including three thousand medical practitioners, coincidentally the same as the number of medical signatories on a petition in favour of vivisection that had led the Home Secretary to water down the provisions of the 1876 Act.⁸⁰

The cardiologist Sir Thomas Lewis (1881–1945), who was said to have coined the term ‘clinical science’, hastily arranged for the BMA to

convene a conference on research and animal experimentation, which predictably concluded that experiments on dogs were essential to 'the progress of medical science', and the bill was voted down at its second reading.⁸¹ It did not help that the National Canine Defence League had overstated their case by claiming that physiologists were still staging 'demonstrations of a prolonged and agonising nature' for the benefit of their students, though such demonstrations were the one thing that public pressure had succeeded in curbing. The NCDL's out-dated caricature of medical teaching offended the physiologist J.B.S. Haldane (1892–1964), a humane man who became a vegetarian in later life and who maintained that scientists should avoid causing suffering to animals unless prepared to volunteer as experimental subjects themselves: he offered £100 reward for evidence of a cruel physiological demonstration having taken place within the last ten years, with no claimants.⁸² The Dogs Bill was brought up again in 1925, only to be blocked in the Lords by peers representing the combined interests of the MRC, Royal College of Surgeons, Royal College of Physicians, and BMA.⁸³

Throughout the inter-war period, the BMA staunchly opposed all parliamentary measures aimed at restricting vivisection.⁸⁴ In 1922, 1924 and 1930 Joseph Kenworthy MP (1886–1953) tried to introduce a bill on behalf of the BUAV to prevent National Insurance money (a form of income tax) being spent on vivisection, but the leaders of the BMA (without consulting their membership) rallied medical MPs to deny the bill parliamentary time.⁸⁵ Later in the year, the BMA's Secretary asked local branches to lobby their parliamentary candidates not to give the anti-vivisection pledge that some voters wanted. Included with the request was a list of MPs—67 out of a total of 615—whose anti-vivisection views were so well known that it was thought not worthwhile to approach them. All but six were members of the labour party.

One well-known socialist who did not agree with them was H.G. Wells (1866–1946), a graduate of the Royal College of Science in Kensington and sometime Labour parliamentary candidate for the University of London, who weighed in with a newspaper article denouncing anti-vivisectionists' 'fanatical illusions' and arguing that their real battle was not against cruelty but the scientific quest for

knowledge.⁸⁶ Bernard Shaw replied for the antis that Wells's vision was the 'science' of imbeciles, since it would lead not to a better understanding of the world but to more and more introverted experimentation. The two writers personified the orthodox and alternative attitudes to science. To Wells's argument that the medical profession was 'massively in support of vivisection', Shaw replied that they had been taught to defend it as a 'tenet of faith', though they did not 'massively practice it'.⁸⁷ Though the RDS made much of the overwhelming support for vivisection amongst doctors, it was unsurprising given that no one could go through medical school without being indoctrinated in the importance of animal research.⁸⁸ Furthermore, for a doctor publically to support the anti-vivisection lobby was tantamount to professional suicide. The BUAV president Dr Walter Hadwen was barred from joining the BMA, and was subjected to what appears to have been a vexatious trial for medical manslaughter after the death of a patient in 1924.⁸⁹

The repeated thwarting of the Dogs Protection Bill shows the strategic effectiveness of mobilising medical and parliamentary influence in support of animal experimentation. The RDS had less money to spend than the anti-vivisectionists, no donations from the public, and little popular support: it would have been impossible for them to muster a substantial petition *in favour* of experimenting on dogs, stray or otherwise.⁹⁰ However, they were able to persuade most of the few dozen medically and scientifically trained members of the House of Commons to oppose anti-vivisection bills whenever they arose. That these elected representatives had no qualms about ignoring public opinion reflects the paternalistic nature of medical science, as well as politics, at the time. Perhaps they decided that animal experimentation was for the good of the British people, whether they wanted it or not, though those MPs with connections in the research industry might be suspected of self-interest. Whatever their motives, pro-vivisection parliamentarians had the distinction of ignoring some of the largest petitions ever presented to the British government.

The involvement of the BMA was important in persuading both politicians and public that the nation's health and prosperity depended upon animal research. Led by a generation of doctors trained to accept laboratory experiments as the basis of medical knowledge, the

Association treated any threat to vivisection as a threat to their profession, which they countered by producing, on demand, pro-vivisection statements to suit the RDS's purposes.⁹¹ In common with the RDS and the anti-vivisection lobby, the BMA did not limit its statements to answering questions of fact, but gave strong ideological support to a position that it regarded as non-negotiable.

'Dog Burke and Hare'

In a 1927 memorandum, the MRC stated 'There is no medical practitioner who does not use in his daily work information which he owes to experiments on dogs', and went on to say that, in many respects, the dog's anatomy was the nearest 'available' to that of man.⁹² Whether this latter statement can be regarded as true depends on the significance of the word 'available'. It was certainly not the case that, as Viscount Knutsford told the House of Lords in 1924, the dog 'is more closely allied to man in what I may call its internal arrangements than is any other animal'.⁹³ Apes are obviously more closely related, and even if we charitably suppose his lordship meant British, domesticated animals, for a closer match he would have had to look no further than the pig. The truth was that experimenters preferred to use dogs because they were a convenient size to work with, relatively compliant, and so numerous they could be obtained cheaply and easily. The BMA went beyond defending the sale of dogs for experimentation, by demanding, in an echo of anatomists' calls for pauper dissection a century earlier, that the law be changed so that all strays that were 'unclaimed and obviously unwanted' were automatically made available.⁹⁴

University College London was among the dog dealers' best customers. Its professors included some of Europe's most distinguished physiologists, whose students were exposed to a diet of experimental physiology far in excess of anything they needed to learn medicine: by the 1940s they were receiving a total of over 300 h of practical teaching in experimental physiology, around ten times more than in any present day medical school.⁹⁵ Obtaining sufficient animals for research and teaching on this scale was challenging, and while London, like any

big city, had plenty of stray dogs, it was illegal under the 1906 Dogs Act to give or sell them to a laboratory. Dogs for vivisection had to be purchased from dealers, though as the provenance of any given dog was almost impossible to establish, the dealers found it easy to flout the law.

University College was first linked with dog stealing in 1913, when Professor Starling was summoned to the High Court to give evidence in a case.⁹⁶ Starling was a robust defender of the use of stray dogs for experimentation, arguing that as they were commonly euthanised anyway, they may as well be employed for useful purposes first.⁹⁷ On this occasion, the College was acquitted of any wrongdoing, and its physiologists continued to source dogs from local dealers. Thirteen years later, when sentencing a dog-stealer to six months hard labour for receiving and ill-treating two Irish terriers, a London magistrate alluded to the College's continuing involvement:

You [Hewett the dog seller] are no doubt a cruel and unscrupulous man, and anything I can do to stop this sort of thing I will. I must not say too much because the people who employ you are not here and are not represented. Anyone who has heard this case must have a feeling of considerable uneasiness as to what is taking place. I have been told that a dog-stealer is employed by this school [University College] to supply them with dogs for physiological experiments.... It has been often said in these Courts that if there were no receivers there would be no thieves. At 8 a.m. two valuable pedigree dogs are missed from outside a house. At 9 o'clock they are taken to this school in a sack under circumstances of great cruelty, and in 24 h they would have been dead. No questions would have been asked. It must raise a feeling of considerable alarm among animal lovers to find that this has been going on for some time.

It certainly raised alarm, but it was impossible to prove that the physiologists knew the dogs they were buying were stolen. In their defence, the College pointed out '[t]hat the man Hewett has never been an employé ... [t]hat the professor of physiology had no means of ascertaining that Hewett had been convicted [in the past] of dog stealing', and that the professor had always '... required a written guarantee that all the animals so delivered by Hewett and by the other dealer with whom he traded were legitimately obtained'. The National Canine Defence League was

suspicious: if the College was obtaining the dogs legally, why were they being brought there ‘in sacks, as if they were potatoes’?⁹⁸ Lord Banbury thought the insistence on a written guarantee was also incriminating, since only a person who suspected they might be buying stolen goods would be sure to obtain one.⁹⁹ Moreover, the dogs showed signs of having been injured, as if their captors had found it necessary to subdue them.¹⁰⁰

Rumours persisted, and University College soon found itself in the police news again, after one George Phipps was charged with stealing a wolfhound from outside its own home. The dog’s 76-year-old owner tellingly went straight to UCL, where he inquired for Professor Ernest Verney (1894–1967). The Professor had the cages checked and the old man was reunited with his dog, which apart from a bump on the head was ‘none the worse for his adventure’. At Phipps’s trial (which the dog attended) there was more bad publicity for the College:

A boy of fourteen, who said he was ‘animal attendant’ at University College, said he had known the defendant for about four weeks. He (the defendant) helped a man named Jackson to fetch dogs to the college.

Counsel: Mr. Jackson often supplies dogs for the college?—Yes.

He brought two on November 19?—Yes’.

I would remark here that it is curious that a boy of fourteen should be employed to look after animals. I do not suppose any of your Lordships would give the charge of your animals solely into the hands of a boy of fourteen. But this is what emerges from those two statements, that within a fortnight two cases of stolen dogs are brought forward and in both of those cases these dogs were going to University College.¹⁰¹

The ‘University of London Animal Welfare Society’, set up by Starling to demonstrate that UCL took a responsible approach to research,¹⁰² sometimes had to arrange for dogs to be nursed back to health to make them fit enough for vivisection, but had never questioned the vendors about why they were delivered in such a poor state.¹⁰³ Lord Banbury’s allegations of a cover-up seem to have been warranted. When one medical MP commended the use of dogs in research on the grounds that they were cheap, this suggested, said Banbury, that they were being

supplied illegally: 'Of course if you steal the dogs you do not pay much for them'.

In 1926, the BUAV decided there was enough evidence to fund an action against Verney, and while they were no doubt gratified when the sensational news that a University Professor had been summoned for 'receiving' was splashed across the newspapers, it soon became obvious that there was no chance of a conviction.¹⁰⁴ At Clerkenwell Police Court, Verney's innocence seemed to be assumed from the outset: he was allowed to sit at the solicitors' table rather than in the dock, and although the court was told the BUAV had paid for the plaintiff's lawyer, there was no mention that Verney's defence was supported by the RDS.¹⁰⁵ Dismissing the case, the magistrate said it should never have been brought, and ordered the prosecution to pay costs, though he did add that the College (which was buying over five hundred dogs a year) should make more stringent enquiries in future.¹⁰⁶ A spokesman for the College told the press: 'I am speaking for a large body of opinion which is tired of this slobbering by people who have nothing better to do than look after pups, parrots and pigeons'.¹⁰⁷ For the public, the message was simple: 'Watch Your Dog'.¹⁰⁸

The parallels with body-snatching are extensive: the clandestine but widely-known market for 'subjects', the legal ambiguities, the professional denial of any suspicion, and the prosecution of middle men while the doctors went free. The defence of the physiologists who purchased dogs was the same as that of the anatomists who had purchased cadavers: they did not *know* that any crime had been committed to supply their needs, and were not responsible for the actions of others. Their shady deals were only possible with the complicity of a public most of whom simply did not care where scientists obtained their *materiel*. The animal victims, like the human victims of Burke and Hare (a comparison made in the press), were worth more dead than alive; they were, as one dog stealer told Starling's protégé Professor Lovatt Evans (1884–1968; his contribution to the war effort included working on poison gas at Porton Down), 'not worth a penny as dogs',¹⁰⁹ and like the victims murdered for dissection, they came mostly from the lowest classes, and nobody missed them. 'We want only mongrel dogs', said Evans,

‘...valuable dogs would be too delicate for us’: it required hybrid vigour to be vivisected.¹¹⁰

The BUAV would scarcely have been so naïve as to have expected a conviction; their motive was presumably to cause a scandal, and in this they succeeded, for even after Verney was acquitted on the legal technicality that he had not actually been in possession of the dog whilst it was in a cage in his department, the name of University College was still in the news for all the wrong reasons.¹¹¹ Questions were asked in the House of Commons and it made headlines that the College had ‘used’ 1,147 dogs in the past two years.¹¹² The inevitable public reaction followed, and the College received a flurry of letters: from anti-vivisection ladies, berating them for callousness and threatening divine retribution (‘I am sorry for all vivisectors when their time comes to leave this world!’); from the owners of lost dogs, pleading for the professors to look in their laboratory cages; from people offering to sell unwanted dogs to the physiologists; and even one from a lady offering to sell her own body for research. One man who had sent a puppy to the vet to be destroyed only to discover that the lad who had taken it had sold it to a dealer ‘for the sake of the money he gets from the Hospitals for vivisection’ pleaded to be allowed to buy the dog back, to spare her further ‘misery’.

Such compassion was lost on most experimenters: why, asked the RDS, did the anti-vivisectionists not simply accept the use of strays and so put an end to dog-stealing?¹¹³ The fate of strays was, after all, a grim one. The RSPCA, the largest provider of homes for stray dogs, refused to sell them for vivisection, but could not cope with the numbers and destroyed tens of thousands every year by ‘painless’ electrocution.¹¹⁴ Was not selling them to laboratories instead the logical thing to do? When Walter Hadwen, one of the few doctors still campaigning against anti-vivisection in the inter-war years, challenged the RDS about the vivisection of strays, they denied any knowledge of it.¹¹⁵ They were in fact trying to get it legalised, and used their influence to plant a parliamentary question on the subject, having already supplied the Home Secretary with ‘the necessary facts to provide an answer’. According to Lovatt Evans, assisting with a scheme to make stray dogs available for vivisection was ‘the best opportunity that the RDS has ever had to render us [UCL physiologists] real service’.¹¹⁶

Conclusion

One of the most frequent criticisms of anti-vivisectionists between the wars was that they were motivated by sentiment and not logic; a criticism based, I have argued, on a paradigm of dispassionate, amoral science which, though prevalent, was still far from commanding universal assent. It might have been expedient to vivisect strays, as it had been to dissect paupers, but was it right? There were many in the anti-vivisection lobby whose feelings told them it was not. Vivisectionists, however, wielded influence where it counted. It was practically impossible to join the staff of a large teaching hospital if one was opposed animal experiments, and it was from this metropolitan élite that the leaders of the medical profession—presidents of the medical royal colleges and directors of research institutes—were drawn. They pronounced with authority that vivisection was necessary for medical progress, and it was difficult for laypeople or rank-and-file doctors to gainsay them.

Despite its influential supporters, the RDS saw itself as outnumbered and beleaguered by anti-vivisection campaigners with superior numbers and resources. The antis certainly had more money to spend, though any advantage was partially nullified by divisions within the movement, and winning the moral argument proved easier than winning the battle. It is significant that the RDS quickly abandoned their tactic of sending speakers to public meetings and engaging in competitive debates because discussion seemed to be getting them nowhere. It was easier to rely on bullying and intimidation: at a meeting in 1927, in the wake of the UCL dog-stealing scandal, Shaw was unable to make himself heard over the din of two hundred medical students, and in 1929, rowdy students literally broke up the annual general meeting of the BUAV.¹¹⁷

The fight for effectively unrestricted vivisection was won in the courts and parliament by clever tactics and collusion between those with vested interests. It is a moral certainty that the staff of University College knew that some of the dogs they purchased were stolen, but the RDS's lawyers correctly argued that as the physiologists had not

technically been in possession of the dogs, they could not be guilty of receiving stolen goods. Parliamentarians knew that the public was opposed to vivisection, but the RDS and BMA could count on the support of enough members with medical interests to ensure that legislation to curb it was blocked at every stage, in the knowledge that, since animal experimentation was believed to contribute to national prosperity and security, no government would want anti-vivisection legislation to become law.

With legal challenges to vivisection blocked by parliament and the courts, and a mood of optimism that looked to scientific progress to bring peace and prosperity, anti-vivisection was beginning to look like a lost cause whose supporters were reactionary and selfish, putting their personal feelings before the interests of their own species and their own country. It would take the great depression of the 1930s to revive the link between radical politics and animal welfare, as the state's (mis)treatment of animals once more became a surrogate for its failure to protect its own citizens.

Notes

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5. Tansey, 'The Queen'.
6. 'The Home Office report on experiments on living animals performed in 1906', *Lancet*, 1 (1907), 1502.
7. Kean, *Animal Rights*, 104.

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17. *The Fight Against Disease*, n.d. [1921], 11.
18. Hopley, *Campaigning Against Cruelty*, 23–5.
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23. Minute book, 23 June, 19 August, 20 October 1908, Well SA/RDS/C1; RDS, *The Fight Against Disease*, n.d. [1921], 12.
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29. Minute book, 19 July 1909, 24 October 1928, p. 119, 24 October 1934, p. 159, Well SA/RDS/C1; SA/RDS/C2; Kean, *Animal Rights*, 149.
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31. Minute book, 18 July 1910, Well SA/RDS/C1; Niven, *History of the Humane Movement*, 89.
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77. Founded as the London Anti-Vivisection Society in 1876, it became the LPAVS in the early twentieth century, though there were never any branches outside London.
78. RDS minutes, 21 March 1923, 47; 22 May 1928, 113, Well SA/RDS/C2; *The Fight Against Disease*, n.d. [1921], 4.
79. BMA files, Well MP214 SA/BMA/C87.
80. Charles R. Johns, 'Petition to parliament', *Cornishman*, 9 March 1927, 7; Hopley, *Campaigning Against Cruelty*, 5; Theodore A. Cook, 'Dogs for research', *Times*, 7 March 1927, 20 (Johns 1927; Cook 1927).
81. Arthur Hollmann, *Sir Thomas Lewis: Pioneer Cardiologist and Clinical Scientist* (London: Springer-Verlag, 1997) (Hollmann 1997).
82. Ronald Clark, *J.B.S: The Life and Work of J.B.S. Haldane* (London: Bloomsbury Reader, 2011) (Clark 2011).
83. 'House of Lords, March 31st, 1925', *The Fight Against Disease* (1925), 13–14.
84. In 1927, the Secretary of the RDS wrote to the MRC to reassure them that, every year, the BMA had 'taken active steps in Parliament'

- to prevent the passage of the various Dogs Protection bills, Well SA/BMA/C86.
85. 'Anti-vivisection bill', *Gloucester Journal*, 6 December 1930, 12; 'Vivisection bill opposed in public interest', *Western Daily Press*, 15 December 1930, 5 (Vivisection Bill Opposed in Public Interest 1930).
 86. H.G. Wells, 'The way the world is going', *Sunday Express*, 24 July 1927 (Wells 1927).
 87. George Bernard Shaw, 'These scoundrels!', *Sunday Express*, 7 August 1927 (George Bernard Shaw 1927).
 88. 'Notes', *The Fight Against Disease* (1927), 30–1.
 89. Hopley, *Campaigning Against Cruelty*, 37–42.
 90. Letter from the medical secretary to the MRC, 11 March 1927, Well SA/BMA/C86.
 91. In some cases, BMA members obviously did not support their Council's position: John Round was both honorary physician to the Anti-Vivisection Hospital and chairman of the BMA's Greenwich division: Obituary, *BMJ*, 1 (1937), 1234.
 92. 'What mankind owes to dogs', *Daily Chronicle*, 8 June 1927, 4.
 93. House of Lords debate, 25 March 1924, *Hansard*, 56, c988.
 94. Letter from the medical secretary to the MRC, 11 March 1927: Well SA/BMA/C86.
 95. Tansey, 'The Queen'.
 96. UCL archives, Kew (hereinafter, UCL) MSS add. 273.
 97. Ernest Starling, 'On the use of dogs in scientific experiments', n.d., Well SA/RDS C1.
 98. 'Echo of dog-stealing case', *Dundee Evening Telegraph*, 2 December 1926, 6; 'Vivisection and dog-thieves', *The Abolitionist*, 1 December 1926, 139.
 99. House of Lords debate, 8 December 1926, *Hansard*, 65, cc1346–7.
 100. 'Magistrate on sales in the Caledonian market', (newspaper cutting), UCL Bayliss papers, MSS add. 273.
 101. *Hansard*, 8 December 1926, 65, c1345.
 102. 'Who sups with the Devil...', *Anti-Vivisection Journal*, June 1926, 71.
 103. M.R. Ellinger, 'Antivivisection' (newspaper cutting), 24 December 1926, UCL MSS Add 273.
 104. 'Vivisection: professor charged with receiving', *Johannesburg Star*, 9 December 1926.
 105. 'Dogs for college experiments', *Dundee Evening Telegraph*, 22 December 1926, 5.

106. 'Summons against a professor dismissed', *Western News*, 23 December 1926, 2; 'Dogs for experiments', *The Star*, 14 December 1926 (Summons Against a Professor Dismissed 1926; Dogs for Experiments 1926).
107. 'Alarm among dog lovers', *Daily Herald*, 23 November 1926 (Alarm Among Dog Lovers 1926).
108. 'Watch your dog', *John Bull*, 4 December 1926.
109. 'Dog Burke and Hare', *Evening Standard*, 22 November 1926; Robert Blatchford, 'Betraying dumb friends', *Sunday Chronicle*, 28 November 1926, 10 (Burke and Hare 1926; Blatchford 1926).
110. 'The dogs a college bought from a thief', *Evening News*, 22 November 1926 (The Dogs a College Bought from a Thief 1926).
111. 'The dogs' case', *The Fight Against Disease* (1927), 3–11.
112. 'Dogs for experiments: 1,147 used at University College in two years', *Star*, 14 December 1926.
113. 'A challenge to anti-vivisectionists', *The Fight Against Disease* (1927), 15–16.
114. 'Stolen dogs case', *Daily Mirror*, 23 November 1926 (Stolen Dogs Case 1926).
115. RDS minutes, 7 December 1927, p. 107, Well SA/RDS/C2.
116. Memo from Lovatt Evans, November 1926, Well SA/RDS/C2.
117. 'Speakers howled down: uproar at anti-vivisection meeting', *Daily Mail*, 17 June 1927; Hopley, *Campaigning Against Cruelty*, 43.

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