# INTRODUCTION

## Veterinary History Comes of Age

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**Introduction to a Virtual Specical Issue on veterinary history, available at: https://academic.oup.com/shm/pages/veterinary_history**

Like most things 'modern', veterinary medicine has assumed its current form after going through several transformations in the recent past. Many of these changes have been the result of larger developments that were beyond the vets' control: the replacement of animal power with automobiles is one example; the much more recent proclivity to have animal companions (often linked with the 'urban condition') is another.[1] However, there have also been several interesting attempts at conscious re-invention on the part of veterinary surgeons, some of which were really successful, others less so. Throughout the second half of the nineteenth century, for example, vets were constantly struggling to project themselves as the legitimate gate-keepers of urban public health, and were able to wrest at least some authority away from practitioners of human medicine. They were also continually struggling to convince farmers of their usefulness and worth – something that, at least in Britain, they were able to achieve only after the period following the end of the Second World War.[2]

Transformations and re-inventions notwithstanding, if there was one constant factor that undermined veterinary medicine – arguably since its very inception – it was its subordinate position vis-à-vis human medicine. Comparative pathology became, on occasion, a useful ruse that allowed medical men to encroach upon the veterinarian's domain. Also, as concerns around the dangers of zoonoses and infected meat intensified, this led to further attempts by medical authorities to weaken the veterinarian's position.[3] The challenge from medical men was not the only one that veterinarians faced, though; they also had to contend with threats 'from below' in the shape of lay or untrained practitioners, who were easily accessible and offered popular remedies. To be fair to the livestock owners, the trained veterinarian's cures were hardly more effective than the 'quack's', even though the

[1] For more details on the impact of this trend on the nature of veterinary medicine, see Susan D. Jones, *Valuing Animals: Veterinarians and their Patients in Modern America* (Baltimore: Johns Hopkins University Press, 2003); see also Adam Gardiner's article, included in this special issue, titled 'The "Dangerous" Women of Animal Welfare: How British Veterinary Medicine Went to the Dogs'.

[2] One indication of the growing acceptance of the veterinarian's authority in Britain was the growing size of the veterinary pharmaceutical industry. This industry started to show growth in the period following the Second World War, and assumed a significant size only in the 1950s: Andrew Godley and T. A. B. Corley, 'Veterinary Medicines in Britain: Output and Industry Organisation since 1900', *Medical History,* 2011, *55*, 361-364.

[3] For details, see Keir Waddington, *The Bovine Scourge: Meat, Tuberculosis and Public Health, 1850-1914* (Woodbridge: The Boydell Press, 2006); Anne Hardy, 'Professional Advantage and Public Health: British Veterinarians and State Veterinary Services, 1865-1939', *Twentieth Century British History,* 2003, *14*, 1-23; Lise Wilkinson, *Animals and Disease: An Introduction to the History of Comparative Medicine* (Cambridge: Cambridge University Press, 1992).

latter was often seen as a great scandal and curse within veterinary literature.[4] It was not for no reason that the general public saw little difference between 'the shoeing-smith who doctors horses and the doctor who shoes them'.[5] As a result of such perceptions, veterinary medicine began to be seen as an art rather than science, and its practitioners became the targets of pejorative epithets such as 'horse-doctors', 'farriers' etc.

Veterinary medicine was also shaped by certain internal problems that affected its credibility. One of the most significant of these was the excessive focus on equine diseases within the curriculum, right from the days of the establishment of the first veterinary school in Lyons in 1762. In most of the schools that were subsequently opened in Europe, education remained 'practically oriented, general in scope and strongly oriented towards equine medicine and surgery'.[6] Such a bias is understandable, both due to the economic importance of horses and also because the cavalry was, in nearly all parts of the world, the largest employer of trained veterinarians.[7] However, this bias led to unfamiliarity with illnesses affecting other animals, and to a consequent distrust of the vet's abilities and effectiveness.

This distrust or lack of authority, it appears from our abbreviated account till now, has dogged the veterinary profession throughout its existence. No wonder, then, that this has also been the subject of many recent works of history, some of which sketch a narrative of how veterinary medicine has 'come into its own'. We will have occasion to explore such narratives in the following pages, but it is equally important to tackle another related issue here, which is the question of why even the *history* of veterinary medicine has taken so long in 'coming into its own'. After all, it has only been a couple of decades since the first professional accounts of veterinary history began to appear, which is quite striking when a comparison is made with the much longer and richer tradition of the history of human medicine.

Part of the reason for the 'problematic and frustrating' nature of the earlier historical accounts – written mostly by veterinarians, but also by non-veterinarians -- is their deep involvement within the struggle to win legitimacy for the profession.[8] Simultaneously, there has been an inability to challenge older modes of writing history. As late as the 1960s and 70s, many accounts of the history of veterinary

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[4] Abigail Woods notes that 'many veterinary remedies were little different from home or patent medicines': 'Breeding Cows, Maximizing Milk: British Veterinarians and the Livestock Economy, 1930-50', in Karen Brown and Daniel Gilfoyle, eds, *Healing the Herds: Disease, Livestock Economies, and the Globalization of Veterinary Medicine* (Ohio: Ohio University Press, 2010), 59-75, 62. See also Abigail Woods and Stephen Matthews, '"Little, if at all, Removed from the Illiterate Farrier or Cow-leech": The English Veterinary Surgeon, *c. 1860-1885,* and the Campaign Veterinary Reform', *Medical History,* 2010, *54*, 29-54.

[5] Woods and Matthews, '"Little, if at all, Removed"', 50.

[6] Alison Kraft, 'Breaking with Tradition: The Reform of British Veterinary Education, 1900-1920', *History of Education*, 2004, *3*, 316-22, 317. The nature of veterinary courses has come in for a lot of criticism in historical literature. However, new research undertaken by Abigail Woods aims to show that veterinary training extended far beyond short clinical courses delivered by institutions such as the Royal Veterinary College. See Woods, 'One Health, Many Histories', *Veterinary Record*, 2014, *174*, 650-54.

[7] This was true of many of the colonies as well. For an account of the early army veterinarians in India, see Saurabh Mishra, 'The Economic of Reproduction: Horse Breeding in Early Colonial India, 1790-1840', *Modern Asian Studies,* September 2012, *46*, 1116-44.

[8] Ann N. Greene, 'The Now-Opprobrious Title of "Horse Doctor": Veterinarians and Professional Identity in Late Nineteenth-Century America', in Brown and Gilfoyle, eds, *Healing the Herds*, 42-58, 42.

medicine highlighted the contributions of great personages, and sketched a linear narrative of 'progress' over several centuries. Calvin W. Schwabe's prolific writings on the subject are an example of this. In one of his monographs (based on a series of lectures delivered in 1977) he started at the very beginning, with speculations on 'how man first learned to heal'.[9] His account subsequently meandered through ancient Egypt and Greece, ending with a description of 'truly comparative medicine', as he saw it. Interestingly, he adopted a rather instrumentalist view of veterinary medicine in this and other tracts, noting the various uses of veterinary medicine for humans and human medicine.[10] Perhaps this was a ploy for highlighting the significance of the profession, as the importance of animal health for its own sake was not accepted as unquestioningly then as it is today. Admittedly, Schwabe was writing in the American context, where it took longer for the profession to gain recognition. However, veterinarians were using history for similar purposes within Europe too, quite a few of them describing with absolute certainty the transition 'from farrier witchcraft to veterinary science'.[11]

Another, and perhaps the most important, factor that has greatly slowed down the transition toward more sophisticated histories is the separation between veterinary history and history of medicine which Roy Porter had referred to more than a couple of decades ago.[12] As history of medicine has attracted more attention, veterinary history has been pushed to the margins. This is reflected in the pages of influential journals, such as *Social History of Medicine*, which published its first full-length article on veterinary history only in 2002.[13] Such a situation has persisted for so long despite the growing realisation that there have been great overlaps between the two professions, especially since the 'discovery' of zoonoses toward the end of the nineteenth century, and the realisation of the possibility that animals could act as carriers and repositories of diseases.[14] Porter does not offer any explanations for this artificial separation, but it is quite likely that veterinary history has been forced to occupy a lower rung due to the veterinarian's historically subordinate position within the medical fraternity. In other words, the fact that veterinary medicine has -- throughout most of recent history – played second fiddle to 'medicine proper', might have led to a situation where the importance of writing its history is also being discounted.

## New Trends in Historiography

[9] Schwabe, *Cattle, Priests and Progress in Medicine* (Minneapolis: University of Minnesota Press, 1978).

[10] Right at the start of the book he noted that his aim was to examine 'the extent to which veterinary medicine has contributed to the advancement of human health' and 'the ways we might start using this information to advantage in accelerating future medical progress': Schwabe, *Cattle, Priests and Progress*, 4.

[11] See, for instance, Thomas Davidson, 'Veterinary Practice before the Nineteenth Century', *Sudhoffs Archiv,* 1967, *51*, 19-43.

[12] Porter noted that 'it is a sad fact that historians of human medicine and historians of veterinary medicine seem to have relatively little contact with each other. Indeed, in the academic world, it is automatically assumed that a "historian of medicine" is a person who works on the history of human medicine….One unhappy aspect of this is an appalling dearth of significant writings on the history of British veterinary medicine': 'Man, Animals and Medicine at the Time of the Founding of the Royal Veterinary College', in A. R. Mitchell, ed., *History of the Healing Professions,* vol. III (Cambridge: Cambridge University Press, 1993), 19-30, 19.

[13] This was Louis Hill Curth's article, titled 'The Care of the Brute Beast: Animals and the Seventeenth-Century Animal Market-place', which has been re-published in this special issue.

[14] Anne Hardy, 'Professional Advantage and Public Health', *passim*.

Be that as it may, it seems that, with several remarkable works on the history of veterinary medicine being published in the last couple of decades, the tide has finally begun to turn. In fact, even at the time that Porter was writing his essay, some fascinating histories had already begun to appear. These included some really early pioneering works by historians such as C. Van Onselen, whose essay on rinderpest in Southern Africa sought to locate the 'politics of rinderpest' not in conference minutes but in popular reactions to the epizootic.[15] Though Onselen was a bit too ambitious in attempting to unravel social, cultural and economic aspects of rinderpest epidemics within the space of a few pages, his work provides us with a good snapshot of popular reactions and responses at the time– something that has still not been attempted much due to the paucity of sources. It is also worth pointing out here that the large canvas of Onselen's work derives from the fact that some of the early histories of animals and animal diseases, at least in the African context (Helge Kjekshus' work, for example), attempted to locate animal diseases within larger and long-term structures of economic and ecological transformations that occurred during, and as a result of, colonial occupation.[16] Such histories appear to have become increasingly rare in recent times, as the themes being dealt with have become narrower and more sharply focused.[17]

Another one of these early pioneering works, dealing with British veterinary medicine, was Michael Worboys' article on germ theories. This essay is noteworthy not only for exploring the deep relationship between bacteriology and animal diseases, but also for its considered judgement regarding the timing and impact of the supposed 'bacteriological revolution'.[18] This was also a work that tried to build bridges between veterinary history and the history of human medicine and, in this sense, attempted to do the exact opposite of what Porter was lamenting about.[19]

Following these early works, various other aspects of veterinary history have also received some attention. Many of these histories – just like histories of human medicine -- focus on themes such as epizootics, public health, and professionalization. In discussing these themes, some historical episodes/events have received greater attention than others. A case in point is the outbreak of cattle

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[15] 'Reactions to Rinderpest in Southern Africa, 1896-97', *The Journal of African History,* 1972, *13*, 473-88, 474.

[16] Helge Kjekshus, *Ecology, Control and Economic Development in East African History: The Case of Tanganyika, 1850-1950* (London: Heinemann, 1977).

[17] Part of the aim of my own project is to re-engage with this larger picture of medical, economic and ecological transformations that occurred during the colonial period in India. See my forthcoming monograph, titled *Beastly Encounters of the Raj: Livelihoods, Livestock, and Veterinary Health in North India, 1790-1920* (Manchester: Manchester University Press, 2015).

[18] Worboys takes on the theme of the 'bacteriological revolution' in a more head-on manner in his article titled 'Was there a Bacteriological Revolution in Late Nineteenth Century Medicine?', in *Studies in History and Philosophy of Biological and Biomedical Sciences,* 2007, *38*, 20-42. Other noteworthy early works include Lise Wilkinson, 'Glanders: Medicine and Veterinary Medicine in Common Pursuit of a Contagious Disease', *Medical History,* 1981, *25*, 363-384; Caroline Hannaway, 'Veterinary Medicine and Rural Health Care in Pre-Revolutionary France', *Bulletin of the History of Medicine,* 1977, *51*, 431-447; Pule Phoofolo, 'Epidemics and Revolutions: The Rinderpest Epidemic in Late Nineteenth-Century Southern Africa,' *Past & Present,* 1993, *138*, 112-143.

[19] See Worboys, 'Germ Theories of Disease and British Veterinary Medicine, 1860-1890', *Medical History,* 1991, *35*, 308-27. This research was later included in a book that examined bacteriological research into a range of human and animal diseases: *Spreading Germs: Disease Theories and Medical Practice in Britain, 1865-1900* (Cambridge: Cambridge University Press, 2000).

plague in Britain in 1865-7, which was one of the major epizootic disasters of modern times, leading to the death of nearly 279,000 heads of cattle (or nearly six per cent of the total cattle stock). Seen by some historians as 'the most dramatic episode in nineteenth-century British agricultural history', the degree of attention it has attracted is understandable.[20] However, it reflects the degree of maturity attained by veterinary histories that most of these accounts have gone beyond merely recalling the horrors of the episode, and have analysed – in much more sober terms--its implications for the veterinary profession in Britain. Further, though nearly all historians see this as a flashpoint in the story of the professionalization of veterinary medicine, many of these accounts present a nuanced picture of the impact of the epizootic. For instance, Joanna Swabe notes that the outbreak of 1865 forced the government to realise the need for an effective body of specialists; this realisation, she goes on to note, ultimately led to the establishment of a veterinary department and the inception of an organised veterinary service in Britain.[21] However, she also severely qualifies this picture by immediately pointing out that 'although the effects of cattle plague were severe and fervently debated, the subject did not really touch the hearts and minds of the masses…public interest and outcry was rather transitory…'[22] Similarly, while Worboys agrees that the cattle plague led to wide acceptance of the 'importation theory' of disease, he also points towards several divergent theories regarding the origin and character of the disease that were popular at the time (e.g. the 'glandular theory', the 'bioplasm theory' etc.).[23]

Episodes such as the cattle plague outbreak have ensured that rinderpest receives sufficient attention, but other diseases such as foot and mouth disease, anthrax, glanders, bovine tuberculosis and so on have also found their historians. This includes Susan D. Jones' innovative work on anthrax, which she conceptualises as a 'disease in transit' in one of her co-authored articles.[24] The article looks at the production and flow of scientific knowledge and research across various nodal points in the Anglo-American world, and is reminiscent of the 'polycentric communications network' that David Wade Chambers and Richard Gillespie discussed while outlining the process of formation of scientific knowledge.[25] Jones' work is not alone, though, in exploring various themes in ways that were not possible within 'traditional' accounts of veterinary medicine. In another important work, Abigail Woods and Stephen Matthews focus on untrained practitioners, or 'quacks' and 'cow-leeches', as they used to be called by qualified veterinarians.[26] The result is an essay that is rich in historical details, and tells us just as much about the society and culture of nineteenth century Britain as it does about the practice and perceptions of veterinary medicine. Similarly, Louise Hill Curth's work explores the diversity of veterinary

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[20] John R. Fisher, 'Cattle Plagues Past and Present: The Mystery of Mad Cow Disease', *Journal of Contemporary History*, 1998, *33*, 215-28, 215. For figures relating to cattle plague deaths, please see Fisher's article and S. A. Hall's 'The Cattle Plague of 1865', *Proceedings of the Royal Society of Medicine*, 1965, *58*, 799-801.

[21] Joanna Swabe, *Animals, Disease and Human Society: Human-Animal Relations and the Rise of Veterinary Medicine* (London: Routledge, 1999), 74.

[22] *Ibid.,* 75-6.

[23] Worboys, *Spreading Germs*, 52-3.

[24] Susan D. Jones and Philip M. Teigen, 'Anthrax in Transit: Practical Experience and Intellectual exchange', *Isis,* 2008, *99*, 455-585.

[25] Chambers and Gillespie, 'Locality in the History of Science: Colonial Science, Technoscience and Indigenous Knowledge', Roy MacLeod, ed., *Nature and Empire, Science and the Colonial Enterprise*, *Osiris*, 2000, 15, 221-40.

[26] Woods and Matthews, '"Little, if at all, Removed"', *passim.*

practices and cures that existed in the 'pre-veterinary', or the early modern period. In older accounts of veterinary history, such practices would have been dismissed as peripheral to or precursors of the genuine, modern and 'scientific' article.[27]

## History of Veterinary Science in the Colonies

One of the most encouraging signs within the recent historiography has been the increasing interest in colonial history. Most of the histories of veterinary medicine -- at least the ones available in English -- seem to disproportionately favour Britain: a fact that is also reflected in our brief survey till now. Even America and several European countries appear to languish in comparison. In such a context, it is unsurprising that the history of former colonies should have received inadequate attention. The situation appears to be changing slowly but surely within recent historiography, though a lot of the new research on the colonies, led by scholars such as Karen Brown, Daniel Gilfoyle and William Beinart, focuses specifically on developments in South Africa.[28]

These works engage with some of the current trends and ideas regarding the emergence and formation of 'western science'.[29] Taking veterinary research (particularly at the Onderstepoort institute in South Africa) as a case study, both Gilfoyle and Brown argue that colonial laboratories were certainly not carrying out derivative research: there might have been a degree of reliance on breakthroughs achieved in the West, but researchers in colonial institutions quickly re-adapted these to serve their own specific needs. In fact, these institutions often stole a march over metropolitan institutions by carrying out a significant amount of original research that was subsequently adopted elsewhere in the world.[30] Brown summarizes the overall argument by noting that 'western scientific methodologies could ultimately be developed and adapted as much at the colonial periphery as in the metropole, and the colonies themselves played a significant role in the expansion of an imperial, and indeed an increasingly global, scientific culture'.[31] Such an argument can be corroborated through a survey of research in other colonial laboratories as well. The

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[27] Curth makes exactly this point and notes that most historical accounts written in the traditional mould 'are still very judgemental and contain at least some commonplaces on animals' healers being ignorant, shallow or even dangerous before the advent of 'professional' veterinary training': *The Care of Brute Beasts: A Social and Cultural Study of Veterinary Medicine in Early Modern England* (Leiden: Brill, 2010), 3.

[28] Some of the work published by these authors include: William Beinart, *The Rise of Conservation in South Africa: Settlers, Livestock, and the Environment 1770-1950* (Oxford: Oxford University Press, 2003)*;* Karen Brown, 'Tropical Medicine and Animal Diseases: Onderspoort and the Development of Veterinary Science in South Africa, 1908-1950', *Journal of South African Studies,* 2005, *31*, 513-29; Karen Brown, *Mad Dogs and Meerkats: A Resurgent History of Rabies in Southern Africa* (Ohio: Ohio University Press, 2011); Daniel Gilfoyle, 'Veterinary Immunology as Colonial Science: Method and Quantification in the Investigation of Horsesickness in South Africa, c. 1905-1945', *Journal of the History of Medicine and Allied Sciences,* 2005, *61*, 26-65; Daniel Gilfoyle, 'Veterinary Research and the African Rinderpest Epizootic: the Cape Colony, 1896-1898,' *Journal of Southern African Studies*, 2003, *29*, 133-154.

[29] For a critical summary of these debates over the nature and process of formation of 'Western Science', see Mark Harrison, 'Science and the British Empire', *Isis,* 2005, *96*, 56-63. See also the Introduction to Kapil Raj's monograph, titled *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900* (Basingstoke: Palgrave Macmillan, 2007).

[30] For some examples of this, see Gilfoyle's 'Anthrax in South Africa: Economics, Experiment and the Mass Vaccination of Animals, c. 1910-1945', *Medical History,* 2006, *50*, 465-490.

[31] Brown, 'Tropical Medicine and Animal Diseases', 515.

veterinary laboratory in the Kabete area of Kenya, for instance, rivalled Onderspoort in terms of the significance of research being carried out there, and there was often a conscious rivalry between scientists working at these two institutions.[32] Similarly, the Imperial Bacteriological Laboratory at Muktesar in India (established in 1890) carried out pioneering work,[33] including developing a vaccine for rinderpest which was subsequently used widely within the country and outside it.[34] What is remarkable is that scientists working at the laboratories in Muktesar, Kabete and Onderspoort did not hesitate to challenge the authority of major metropolitan scientific icons such as Robert Koch and Louis Pasteur. One example of this is Koch's trip to Muktesar in 1897, which received a massive amount of attention and publicity. The primary goal of his visit was to conclusively prove his theory that the bile of animals suffering from rinderpest could be used to make effective vaccines.[35] Koch, however, was not entirely successful in his mission as the results of his experiments were not seen in a very favourable light by scientists in India. Alfred Lingard, head of the Muktesar institute, filed a negative report on Koch's experiments,[36] while the Principal of the Lahore Veterinary College made the guarded comment that 'it is, perhaps, too early yet to give an opinion; in its present form it is rather unwieldy, and would only be applicable to certain cases...'[37] Additionally, his theory also met with some degree of resistance in South Africa, where it was first conceived.

The colonies did not display autonomy only with respect to scientific research: public health policies that aimed to preserve the health of the livestock population also differed to a considerable extent from those that were adopted in the metropolis. For authorities in India, the policy of 'stamping out' and slaughter, so effective in containing the cattle plague of 1865, was complete anathema. This was partly due to a conviction that cows occupied an absolutely central place within Hindu religious life, and any attempt to slaughter them could potentially lead to 'another 1857'.[38] Simultaneously, such widespread measures were also rejected due to their financial implications and the inability of a relatively small veterinary administration (which, furthermore, was preoccupied with horse-breeding for the colonial cavalry) to argue

[32] Gilfoyle, 'Veterinary Immunology as Colonial Science', 52.

[33] The laboratory was, in the first instance, established in the plains of Poona in 1890. However, it was subsequently shifted to Muktesar as the hills were expected to provide a more conducive climate for bacteriological research.

[34] For more details on the operations of the Muktesar laboratory, see Mishra, *Beastly Encounters of the Raj* (forthcoming). See also Pratik Chakrabarti's *Bacteriology in British India: Laboratory Medicine and the Tropics* (Rochester: University of Rochester Press, 2012).

[35] In fact, as Gilfoyle's account shows, Koch had been inspired in developing his bile theory of treatment by observing one of the methods of inoculation in vogue in South Africa. To an extent this shows that hallowed figures such as Koch were not averse to borrowing from 'non-scientific', local practices: 'Veterinary Research and the African Rinderpest Epizootic', 142.

[36] After detailing all the experiments carried out by Koch in his report, Lingard reached the conclusion that 'the experiments commenced at Muktesar, under the supervision of Professor Koch to ascertain the value of rinderpest bile as a protective agent against that disease in India, have up to the present proved very little': Lingard, 'Preliminary Note on Rinderpest': British Library, Asia, Pacific and Africa Collections, file no. V/27/541/20, 10.

[37] In *The Friend of India and Statesman*, Calcutta, *42*, 20 October 1897.

[38] The spectre of the revolt of 1857 haunted the British throughout the rest of their rule in India. Arguably, as a result of these notions, the religious/holy nature of cows was underlined too heavily by the colonial government, due to which its other symbolic meanings (as a sign of prosperity; a source of livelihood) were partially eclipsed.

in their favour.[39] However, though widespread measures were rejected in one colony, measures such as quarantines and mass vaccination were adopted with some gusto in other colonies such as South Africa and Kenya.[40] One explanation for this difference could be the fact that the colonial government was much more anxious to prevent epizootics from spreading in settler colonies, where they were mindful of the interests of white farmers. In colonies such as India, where protecting 'public cattle' did not lead to any direct benefits for the state – e.g. an increase in revenue, except indirectly by ensuring availability of cattle for agricultural production – they were much less imbued with benevolent impulses. Such an argument appears slightly simplistic at first sight, especially as it goes against some widely accepted notions such as the idea of 'constructive imperialism'; however, the validity of such arguments can only be tested if we have a much greater number of studies on the colonies.[41] This is not a very remote possibility, as there are already encouraging signs that we might soon have a much larger number of works dealing with the history of veterinary medicine in the colonies. For instance, in a recent edited collection titled *Healing the Herds* (referred to in the footnotes above), ten out of the fourteen essays deal with the colonial situation. Some of these essays are of an exploratory nature, but it is encouraging nevertheless to see such a spurt of interest in hitherto neglected regions. An additional positive sign is that quite a few of these articles deal with non-British colonies, another area that has been neglected till now.[42]

## Towards a Social History of Veterinary Medicine

It is not just the colonies, though, where there are gaps in our knowledge that need to be filled. Even historians working on Western Europe have barely begun to scratch the surface of an astonishingly rich and extremely interesting history of a form of medicine that had a direct and very intimate link with people's daily lives and livelihoods. In fact, as mentioned before, it is only the history of the professionalization of the discipline that has received any degree of attention from scholars: links between livestock, disease, and the life and livelihoods of peasants and farmers has hardly been analysed till now. Greater attention to these links could potentially lead to several really interesting lines of historical research. Animal diseases, after all, had such an impact as to transform social and economic lives of people. One of the most prominent examples (though from the non-European context) that immediately comes to mind is the one furnished by the celebrated anthropologist E. E. Evans-Prichard in his fascinating study of the Nuers in Southern

[39] An all-out policy of prevention and control could prove to be very expensive in a large colony like India. The Dutch colonial settlements in India, for instance, spent three million florins in connection with epizootics in the year 1881-2, which comprised nearly one-third of their total budgetary deficits for the financial year: 'City Notes,' *The Pall Mall Gazette*, *5381*, 30 May 1882.

[40] For details on measures adopted in Kenya, see Richard Waller, 'Clean and dirty: Cattle disease and control policy in colonial Kenya, 1900-40', *Journal of African History,* 2004, *45*, 45-80.

[41] Also, a greater focus on these regions will allow us to not only understand the differences, but also the connections, linkages and networks between them.

[42] Without a substantial amount of work on French and Dutch colonies, it will be difficult to make comparisons between then and the British colonies. Some articles have valiantly attempted such comparisons despite a dearth of substantive accounts, and have raised significant points. See, for instance, Diana K. Davies, 'Brutes, Beasts and Empire: Veterinary Medicine and Environmental Policy in French North Africa and British India', *Journal of Historical Geography,* 2008, *34*, 242-267.

Sudan.[43] The study shows how, during the 1930s, there was a massive transformation in the way in which this pastoralist community lived its life due to a depletion of its cattle stock owing to rinderpest. Though this appears to be an extraordinary case, even settled farming communities in industrialised countries felt the impact of disease outbreaks to a considerable extent or live everyday under the threat of it.

As more studies examine such histories, we will, hopefully, begin to see the emergence of a social history of veterinary medicine. The focus, till now, on the institutional underpinnings of veterinary science, or the level of support it received from the state, has been very useful as little was known earlier about these aspects. However, now that we have an increasing number of works on these issues, perhaps it will be possible for historians to branch off into other, equally interesting dimensions, including studies of popular and folk remedies practiced by farmers. This question deserves special emphasis as such cures were used much more frequently in case of diseased animals than they were in case of humans. As many historians have noted, vets were usually called in – if they were called in at all-- only as the last resort after all other treatments had failed. This was partly due to the fact that the question of cost or economy was of much greater significance when it came to animal health. The farmer often weighed the cost of calling in the vet against the benefits of saving the animal, and made rational economic choices based on such calculations.[44] In fact, in some cases even institutions such as the British army decided that it was more cost-effective to put down diseased horses rather than try and cure them. [45] In such a scenario, there is little doubt that all manner of interesting treatments would have been practiced, and it is likely that mining in this area would lead to rich rewards for historians.

Besides this, there are several other areas that have not been explored, one of which is the question of popular reactions to epizootic outbreaks. This includes not just responses to government measures, but also strategies, ideas, and methods that were used in order to cope with such disasters. Equally importantly, studies of epizootics need to become more broad-based – after all, as Paul Slack and Terence Ranger have pointed out in the context of epidemic outbreaks, they are connected to a larger history of ideas, as they 'support, test, undermine or reshape religious, social and political as well as medical assumptions and attitudes'.[46] Such an argument is equally applicable in case of numerous epizootics that caused a severe disruption of social and economic life in affected regions. Besides the question of epizootics, veterinary medicine in the urban context also merits greater attention, especially the huge increase in middle class anxiety regarding infected meat and dairy products. What we are trying to emphasize here is that there is potential to

[43] Evans-Pritchard, *The Nuer: A description of the modes of livelihood and political institutions of a Nilotic people* (Oxford: Oxford University Press, 1940).

[44] Worboys notes, while writing about pets, that 'for most people, except the wealthy who could afford sentiment, the repair cost of most pets was higher than their replacement cost'. A similar logic could also be applied in case of farm animals, with the additional provision that it was sometimes expedient to slaughter diseased animals in order to prevent the disease from spreading to others in the herd. Worboys, 'Germ Theories of Disease', 312.

[45] Godley and Corley, 'Veterinary Medicines in Britain', 363

[46] Paul Slack and Terence Ranger, eds, *Epidemics and Ideas: Essays on the Historical Perception of Pestilence* (Cambridge: Cambridge University Press, 1992).

produce fascinating histories of veterinary medicine if the question of its social basis is constantly kept in sharp focus.

The articles included in this special issue do exactly that, besides also being studies of nearly unchartered and unexplored themes/regions. All of these have been previously published in the pages of the *Social History of Medicine,* and represent the new crop of research into veterinary history. Eric T. Jennings's essay, for example, is not only one of the few existing studies of veterinary developments in a non-British colony, it also contains a detailed account of the fascinating encounter between colonial laboratories and institutions on the one hand and indigenous beliefs on the other. Very few studies of bacteriology or germ theories, whether in the context of human or animal diseases, have been able to achieve this. Reminiscent to an extent of arguments made by Rajnarayan Chandravarkar in his study of plague in India,[47] Jennings argues that supposedly 'irrational beliefs' regarding colonial health institutions – for instance the idea that patients were regularly strangled and suffocated at Pasteur Institutes – had a basis in certain facts, such as the excruciatingly painful nature of treatment for post-contractual victims. Interestingly, the article also looks at various indigenous beliefs regarding rabies and dogs as instances of 'resistance' against colonial imposition.

Other articles in the volume deal with new and interesting themes in the British context. Louis Hill Curth's research (in this article and elsewhere) is, to my knowledge, the only existing survey of 'pre-veterinary developments' in early modern Britain. She explores some of the issues that we have been discussing in the previous paragraphs, including the nature of the medical marketplace and the role of informal practitioners. Significantly, this is a nuanced work that does not lump all these practitioners together into an amorphous mass, but delineates the various kinds or 'classes' of practitioners that existed at the time.

While Curth discusses 'pre-veterinary' developments, one of Abigail Woods's articles included in this volume analyses the period *after* the veterinary profession is generally supposed to have been established on a firm basis. This period has generally been ignored by historians as it has been assumed that the veterinary profession -- once the struggle for professionalization was more or less over -- experienced a phase of relative stability and stasis. In her essay titled 'Is Prevention Better than Cure' Woods goes against such assumptions, showing that the period after the 1950s was in fact one of rapid change, with veterinary professionals struggling to cope with the withdrawal of state subsidies that they had enjoyed till then. She also points toward new developments, such as the growing importance of the small companion animals, which allowed veterinarians to tide over some such challenges.

This narrative regarding the significance of small companion animals receives further and more in-depth treatment in Andrew Gardiner's essay. Challenging notions that these animals only became significant during a period of 'hyper-urbanism' in the post-1950s, he shows the roots of this concern for small animals lie in the inter-war period. The essay highlights the role of animal charities (other than the RSPCA), which have received little mention within historiography.

[47] Rajnarayan Chandravarkar, 'Plague Panic and Epidemic Politics in India, 1896-1914,' in Terence Ranger and Paul Slack, eds., *Epidemics and Ideas: Essays on the Historical Perception of Pestilence*, (Cambridge: Cambridge University Press, Cambridge, 1992), 203-40.

Gardiner argues that the treatment for small animals offered by these charities proved to be hugely popular, and that the vet's growing focus on these animals followed on from the initial success achieved by charities.

The final article in this volume is another piece by Abigail Woods, which deals with the changing perceptions of a disease over the long nineteenth century. Focusing on Foot and Mouth Disease -- though one suspects that similar transformations would have occurred in case of several other diseases as well – Woods analyses why, from being seen as an irritant or nuisance in the earlier part of the century, FMD came to be re-cast as an animal plague by the end of it. One would expect factors such as the greater spread and impact of the disease to be the primary reasons behind such a re-definition. However, Woods convincingly argues that it was in fact the nature of legislative measures that were implemented that gave the disease a fearsome quality. In this sense, she appears to be arguing the exact opposite of the more intuitive argument that it is the self-evidently dangerous nature of a particular disease that makes it necessary to have thorough and strict controls.

Overall, the essays and book reviews included in this issue should allow the reader to form a general idea regarding the direction in which veterinary history is moving, and the avenues for future research. They also demonstrate that veterinary history has travelled a long distance from the older narratives of 'progress', 'civilization', and 'great men'. The fact that this change has occurred within the span of a couple of decades – as this issue shows – is, in itself, 'progress'.

## Acknowledgements

Thanks to the editors of the *Social History of Medicine* for inviting me to edit this volume, and for making several suggestions that have helped improve the arguments being made. Thanks also to Abigail Woods and Biswamoy Pati for going through an earlier draft and suggesting useful modifications.

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