Reading theory or reading historical evidence

The case of Anglo-settler veterinary professionalization

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Introduction

In recent years, methodological shifts in considering colonization, beyond distinguishing different experiences of settler societies like Australia and New Zealand (Beilharz and Cox, 2007) in contrast to Asian or African nations (Spivak 1994), have analyzed multiple settler societies comparatively; thereby increasing focus on settler society as a species, with both commonalities of origin, and variations in historical sequence. This article continues that testing of claims from internalist, or exceptionalist, national explanations of social and economic development. The downside for historical scholars is, however, that using such a large canvas demands tranches of evidence from a wide range of sources, stretching expertise in achieving a synthetic approach to the data. This may lead to interpretive or methodological critique, although this, in turn, is open to counter-challenges about preferring »neater« albeit inadequate national narratives.

Two examples of this contemporary work illustrate the intention to see a bigger historical picture in the development of the modern Anglo-American world. Instead of interpreting modernity through primarily the unit of the nation-state, Weaver (2006) and Belich (2009) outline broader settlement formations in which indigenous populations were subjugated and white European-sourced populations established. They do so as a useful category in which to think about commonalities and patterns in the development of the forms of western modernity that predominate

DOI: 10.2390/indi-v6-i1-132 ISSN 2191-6721

today. Theorists of unitary-versus-multiple modernity/ies, such as Wagner (2010) or Ascione (2013), reflect on the contexts of this modernization, as well as provide additional evidence and arguments for deconstructing European pre-modern-to-modern dichotomies.

Such critique is necessary against pervasive, western-centric perspectives found in a variety of guises—from Marx and Engels (1976) seeing socialism finally supplanting the dialectics of previous historical periods, to Fukuyama's (2006) end of history assertions. Occupations developing as professions in the nineteenth and twentieth centuries were, by the mid-twentieth century in the United States, more assertively than elsewhere, conceived of as arriving at, or evolving towards, a state of full professionalization. Further, and more generally, the process of professionalization was seen as central and naturalized in the development of modern society. Weaver and Belich, respectively, use terms »neo-Europes« and »Anglo-worlds« to capture some of this European settler commonality from their research. Weaver emphasizes land as the fundamental productive resource, where the economic worth of the continent is expropriated, funding the settler revolution through a vast transfer of wealth. Belich stresses the peopling of this new settler world, comparing for instance, the population explosion of Chicago and Melbourne, explicable via Anglo-settler-comparative contexts, otherwise merely curious or disconnected. Presenting supra-national variations like this helps deconstruct singular, linear, and teleological conceptions of modernity.

From functionalist theory to comparative history

This study co-opts Wilensky's (1964) methodology in The *Professionalization of Everyone?*—which has long-held iconic status in the sociology of professions literature, whether being critiqued or approved. It was produced at the high point of mid-twentieth century functionalist sociology between the 1963 *Daedalus* issue of *The Professions,* edited by Everett Hughes, and the 1966 Vollmer and Mills' text, *Professionalization.* The time period Wilensky, Vollmer, and Mills incorporated into their work prefigured, though inadequately, the historical turn in sociological inquiry in

the following decade—a return merely correcting the previous »retreat into the present« (Elias in Mennell 2010, 112) of the trait approach.

Vollmer and Mills differed little from Wilensky in failing to see other historically contingent events in the emergence of individual professions, differences between countries, or indeed, among professions collectively. Until adequate historical accounts challenged mainstream storylines, the continued emphasis on traits created a largely internalist explanation of professionalization (Larson 1977).

Around 1970, books and articles on both sides of the Atlantic challenged the functionalist sociology of professions. Freidson (1970a, 1970b) provided an historical and critical evaluation of professional control and autonomy over work. Johnson's (1972) monograph identified occupational autonomy through a collegial system as one distinct type of occupational power and control; he too drew on historical material and labor-market considerations and incorporated comparative British imperial historical data.

In spite of this paradigm shift inspired by Freidson and Johnson, Wilensky's article enjoyed continuing currency—he was, for example, cited in Macdonald (1995), Krause (1996) and Perkin (1996). His work fitted an era in which increasing professionalization seemed a basic social change process within a linear model of modernizing society, along with trends like bureaucratization and industrialization (Abbott 1983; 1991). By contrast, Mennell (2010, 132) voices a middle range historical-comparative frame: »America has continually become more powerful,« inviting practical theorizing. Naming this geo-political power that would allow the varied historico-political contexts of professions in different countries to be addressed, including the United States' own difficulty acknowledging governmental roles in professionalization.

Wilensky (1964, 142) proposed a five-stage sequence of professionalization: »While the sequence is by no means invariant,« he claimed, »the table shows that only 32 out of 126 dates for crucial events in the push towards professionalization deviate from the following order«:

1. A substantial body of people begin doing full-time, some activity that needs doing.
2. A training school is established.
3. A professional association is formed.
4. The association engages in public agitation to win the support of the law for the protection of the group.
5. A code of professional ethics is developed. (1964, 142)

Wilensky based his discussion solely on eighteen professions in the United States, globally projecting his reading of the data as confirming universalist conceptions of professional development. In contrast, the present study of a single occupation—veterinarians—assesses six English-speaking metropolitan and settler societies. This allows measurement of similarities and differences in professionalization sequences amongst these countries.

A limited comparative method

Today, Wilensky's model reads as naively modernist in outlook. In 1964, it was the most systematic attempt to empirically enumerate a natural history of professionalization following mid-century logics. Here, its comparative application subverts Wilensky's original intention, allowing more nuanced problematizing of modernization processes; professionalization is just one-away from what Ascione (2013) calls »unthinking modernity.«

Figure 1 shows veterinary profession data collected for six English-speaking Anglo-American settler nations. The term »settler« is used here to refer to out-migration from the United Kingdom This settler colonization went beyond controlling indigenous populations, leading in time to the larger proportion of these societies being derived from white settlers from Europe, particularly the United Kingdom and Ireland (Weaver 2006; Belich 2009). In Figure 1, the United States's row comes from Wilensky's table, although, as indicated in the notes, three dates needed amending.

Considering evidence gathered

The expanded description below, using Elliott (1972), reveals that functionalist explanations are inadequate in interpreting the process of professionalization; the evidence is better interpreted as a western-centric, Anglo-American, or even Amero-centric gaze.

Fig. 1: Veterinary professionalization in Anglo-settler societies

Country	Became full-time occupation	First training school	First university school	First local professional association	First national professional association	First state license law	Formal code of ethic adopted
United Kingdom[1]	18th Cent	1791*	1791*	1858[2]	1844 1882	1881	?
United States[3]	Early-mid 19th Cent	1852	1879[4]	1854	1861[5]	1886	1886
Canada[6]	Mid-19th Cent	1862*[7]	1862*	1874	1948*	1890	1948*
Australia[8]	Mid-late 19th Cent	1888	1908	1912	1921	1923	1956
South Africa[9]	Late 19th Cent	1920*	1920*	1903	1920	1933*	1933*
New Zealand	Late19th Cent	1904 1964*[10]	1964*[11]	1923*	1923*	1926	1956[12]

Notes: Same dates in any row marked by asterisks indicate same event.

1. *Veterinary Record* (1945); and personal correspondence with B. Horder, Librarian, Wellcome library.

2. Barber-Lomax (1963).

3. Wilensky's date of 1875 is replaced by Ho's 2005 date (1879), 7.

4. *Veterinary Record* (1945), 624. Alexander Liautard, an alumnus from Toulouse, is recorded as founding the first viable veterinary college.

5. *Veterinary Record* (1945), 624. June 1861 is given as the foundation date of the United States Veterinary Medical Association (USVMA), renamed in 1895. However, the first meeting was held in New York, June 9, 1963.

6. Personal correspondence with C.A.V. Barker, University of Guelph, Ontario.

7. Cameron (1953). However, a difference source gives both these dates as 1864.

8. Hindmarsh (1962). Also personal correspondence with J. C. Beardwood, Australian Veterinary Association Archivist.

9. Diesel (1963). Also, Gilfoyle and Brown (2010).

10. Burns (2009).

11. Shortridge, Smith and Gardner (1998). Also, Thompson (1919).

12. Inferred from Laing (1974).

Development of full-time occupation

In the professionalization process, according to Elliott, first:

> [A]n occupational group must emerge, engaged in full-time work on a particular set of problems. This may be the result of a switch from amateurism to professionalism, or it may follow from the specialization of knowledge within an existing occupation made possible by institutional change. In all cases a new occupational group is likely to have to demarcate its own position and face competition from overlapping occupations and professions. (1972, 113–15)

In the case of the professionalization of veterinarians, like other professionalizing occupations, it is almost impossible to give an exact date when a new occupation can be said to exist where it did not exist previously. There seems to be, invariably, a liminal period, not precisely definable, between non-emergence and emergence of a full-time workforce. It is curious Wilensky named 1803 as the year when veterinary medicine became a full-time occupation in the United States. A more general designation for the start of the American veterinary profession, comparable to other entries in his table, would have been »early nineteenth century,« or »circa 1800.« Wilensky's evidence for this date is unknown; the first United States graduate from the London Veterinary School, John Haslam, returned to his home region and set up practice in Baltimore in 1803 (Smithcors 1964).

Veterinary medicine developed as one of the modern professions between one and two centuries ago, at approximately the same time as other professions were emerging in newly industrializing and urbanizing societies. At the end of the eighteenth century, most veterinary activities in Europe were performed by two general occupational groups, the farrier and the cow-leech. In the same way that important differences between physicians and surgeons was rooted in their social status, the differences between farrier and cow-leech were reflected in their social standing and the objects of their attention. Such differences were no less

marked, although animal practitioners generally had a lower social status than either physicians or surgeons.

Farriers had little education and limited skill, although, they considered themselves above cow-leeches and cattle doctors since they treated the more important animal—the horse. A male occupation, farriers usually served an apprenticeship with their fathers; practitioners called »leeches« were often self-taught. Carr-Saunders and Wilson (1964) note that if veterinary professionalization had followed the more typical course, the farrier might have absorbed the new knowledge, built up standards of training, and developed into a profession, but in fact the process went another route. While sick and injured animals have always been attended to, it remained for technical, social, and organizational developments to create veterinary medicine as a modern occupation (Smithcors 1957, 247; Bierer 1955).

The change from farriery to veterinary medicine marked an important change in the degree to which animal treatment was considered a subject amenable to scientific observation and reflection rather than a simple means of livelihood. At first, the actual difference was small, but the decisive shift in the underlying approach had, consequently, elevated the ability of veterinarians. The term »veterinary« was revived from Latin in the eighteenth century to help establish this demarcation. The veterinary acted as a consultant and medical expert, conforming to some degree to the role of non-manual expert. However, the greater association with animal and earthier contexts was a barrier to recognition and acceptance as a professional person. Large animal work has, in the past (though much less so today with the advent of drugs, sophisticated medicines, and other technologies), required considerable physical exertion which had a negative impact on the move of veterinarians toward a professional status.

The veterinary profession is fundamentally similar to human medicine in its basic technologies and bio-medical knowledge. However, Freidson argues that because veterinary medicine as an occupation, along with dentistry, did not emerge in connection with human medicine, this orga-

nizational reality has allowed it to professionalize to the extent it has, rather than be incorporated within the formalized medical division of labor (Freidson 1970, 52).

The social status of early »veterinary surgeons,« was less elevated than their medical or clerical counterparts. All strata in society, including the social elite, had horses that required attention. Solely agricultural animal species, however, because of their rural and farming associations, tended to be correlated with a more humble social status in the kinds of veterinary or other animal care they received. For many practitioners, this influenced their preference for equine medicine.

Inevitably then, the emergence of a definable corps of veterinary practitioners cannot exactly be pinpointed. However, moving down Table 1, we see a succession of events in which this development did take place in these settler countries. Thus, even at this stage in the analysis, distinctions between »old« and »new« professions begin to blur as soon as this comparative perspective is introduced. The historical records show that the rise of the veterinary profession in any one country, region, or state was not an isolated occurrence, but was impacted by, and part of, a much wider series of changes in science, industry, agriculture, establishing nation states, and warfare. Furthermore, where, for various reasons, the development of the profession was delayed in one nation, the changes and developments that had happened earlier elsewhere were not simply re-enacted; instead, a process of transference or diffusion shaped the rise of the practitioner force in the newer setting (not to mention inter-professional emulation). In New Zealand, for instance, farriers sometimes consciously adopted the title »veterinary surgeon« because of what it connoted in the British metropolitan context. This process of cultural feedback occurs in each phase of veterinary professionalization.

Professional training school/university

Another stage in modern professionalization was establishing training and selection procedures through setting up schools and eventually, uni-

versities. Although in Table 1 the United Kingdom is earliest in establishing a veterinary school among this group of English-speaking nations, it was by no means the first country in which such an institution was set up. The experience of animal plagues during the eighteenth century caused repeated decimations of cattle populations, leading European states to implement strong measures against further infiltration of disease from Baltic and Russian areas. An elaborate system of isolation backed up by government inspectors was set up, including, where necessary, armed force to prevent importation of infected animals (Veterinary Record 1945, 610–12).

Government action is seen in Veterinary schools being established in the later eighteenth century as part of this concern with animal health. These schools acted as major landmarks in the emerging modern veterinary profession. The first opened at Lyons, France, in 1762. A second followed at Alfort in 1776; and by the turn of the century, 20 schools were in operation. The third French veterinary school commencement in Toulouse in 1825, was the thirtieth across twelve different countries, and paved the way for scientific and technical research to be directed toward animal health (Veterinary Record 1945, 614).

This veterinary change was part of a broader socio-cultural shift; law, medicine, and the clergy began to alter in this period from what Elliott termed »status professions« into occupational professions. That is, from branches of learning based on classical literature and catering for the sons of the social elite, they began to include a wider range of persons and new empirical ideas influencing other fields of knowledge as well, giving rise to modern professions.

Graduates of the two early veterinary schools established in the United Kingdom played significant roles in all the settler colonies found in Table 1. The London Veterinary College was founded in 1791 under the French principal, Vial de Bel, with the backing of English agriculturalists, particularly, the Odiham Agricultural Society (Pugh 1962; Smithcors 1957). It was originally intended to educate intelligent young men of some social standing to treat all animal species. However, Edward

Coleman, college principal from 1793 to 1839, limited instruction to only the horse and shortened the course to only a few months—negatively, rather than positively, influencing professionalization. The other teaching institution was the Edinburgh Veterinary School, established in 1823 by William Dick, one of the few progressive and highly competent farriers. Instruction was both practical and theoretical and included teaching about all the main farm species; students were examined by the Highland Agricultural Society. Dick's teaching had positive repercussions developing the veterinary profession in both Canada and the United States because of key roles and positions gained in these countries by Edinburgh graduates (Bradley 1923).

By 1844, when the Royal College of Veterinary Surgeons (RCVS) was granted its Charter in the United Kingdom, there were roughly 1,000 graduates from the two schools, the majority of which were from the London school. The Royal College held sole power for examining and certifying qualified veterinarians in Britain. This restriction of entry into the profession became known as the »uni-portal« system and continued for a century until 1948. However, since then, a veterinary degree requires registration as a veterinarian. Glasgow Veterinary School was founded in 1860 by James McCall, and was affiliated to the RCVS in 1862. In 1873, the New Veterinary College commenced in Edinburgh, later becoming the School of Veterinary Science at Liverpool University in 1904 (Swann 1975, vol. 1, 161).

The other five settler countries shown in Table 1 were influenced by colonial ties to the United Kingdom. The United States gaining political independence from the United Kingdom at the end of the eighteenth century, and a similar pattern of burgeoning industrialization, means that the United States's veterinary developmental chronological profile is closer in time to Britain than the other countries (Smithcors 1957, 312). On the other hand, the United States and Canada may be grouped as having certain features in common because of their North American situation. Similarly, South Africa, Australia, and New Zealand show parallels in their antipodean positioning and relationships.

Veterinary education in the North American continent developed largely under the influence of Edinburgh graduates (Gattinger 1962; Ho 2005; Boyd 2009). The Ontario Veterinary College in Canada, for instance, had Edinburgh graduate Andrew Smith as its founding principal. A later historical perspective on the establishment of the United States Veterinary Medical Association noted: »Our veterinary service did not begin to take form until the coming of Professors John Gamgee and James Law from Scotland in 1868« (Veterinary Record 1945, 624). Other examples might be added. A number of attempts to establish veterinary schools in the United States in the 1850s proved abortive. There were several short-lived faculties set up in the 1860s: New York in 1864, Chicago in 1865, and Cornell in 1868.

Canada is an intermediate example of the variations in veterinary development that Table 1 outlines. It is similar to the United States in its North American contrast to the United Kingdom, the influence of Scottish veterinarians, and the timing of its developmental process. However, it is also a member of the continuing British imperial network to which the three antipodean countries belong. The general effect of this centre-periphery relationship between the United Kingdom and the British colonies seems to have been a major retarding factor in most phases of veterinary development, although not always in exactly the same way. In Australia, for instance, setting up the first veterinary teaching institutions preceded the formation of a national professional association by quite a long period, whereas in South Africa, these events occurred quite closely together; and in New Zealand, it was a half-century *after* the founding of a professional association that the first veterinary school was successfully established (Shortridge, Smith, and Gardner 1998, 73; Burns 2009) after an attempt in 1904 which failed for lack of applicants (Thompson 1919). The Australian veterinary schools at Melbourne and Sydney also all but failed in the early decades of the twentieth century, lacking student enrolments.

It has been suggested that one of the differences between earlier and late professionalizing occupations is that the later ones attempt to link their

teaching institutions to universities at an earlier stage in their developmental cycle. This contention is borne out in the case of veterinary professionalization. The first British and Canadian schools were not at their inception affiliated to universities, although all of them have subsequently become faculties or colleges within recognised universities. Only veterinary schools in South Africa and New Zealand, countries in which the veterinary profession has been the most recent to develop, were initially established as university veterinary faculties (Transvaal University College, now University of Pretoria, and Massey University).

Professional associations

Education is linked to forming professional associations:

> [as] part of the continuing process in establishing and defining the occupational function both to set standards and norms within the occupation and to manage its relations with other competing groups. […] the occupation agitates for public recognition and legal support for its control over entry and modes of practice. [finally] the occupation will elaborate a formal code of ethics. (Elliott 1972, 114)

Veterinary professionalization was part of a much wider phenomenon occurring in British and European societies—not just American society. Prior to 1800, professions were mainly informal groups. Then, according to Reader (1966, 163–64), a new process of occupational organization and association began in the United Kingdom:

> the first of the new professional associations was the Royal College of Surgeons chartered in 1800. The Apothecaries got their act with its formidable disciplinary powers in 1815. In 1818 the Institute of Civil Engineers was set up; in 1828 it was chartered. The Institute of British Architecture, founded in 1835 was chartered in 1837 […] The Law Society founded in 1825 was chartered in 1831, but the charter was surrendered for a new one later on. In 1844 the Pharmaceutical Society was chartered, and in 1844 also the RCVS was chartered. (1966, 163–64)

Thus, as Millerson (1964) noted, the veterinary profession was one of the later occupations in this wave of professional organization to establish professional societies. Johnson (1972) incorporates patronage more generally into his typology of contemporary professionalism. At intervals throughout the rest of the nineteenth century, other professional institutions were set up based on different occupational-organizational logics. One of these later bodies was the National Veterinary Medical Association (since changed to British Veterinary Association) in 1881.

Millerson's definition places the RCVS in the category of »qualifying association« and the British Veterinary Association he termed an »occupational association.« Wilensky's focus is restricted to Millerson's »qualifying associations,« merely one of four types in the professionalization process. However, in the United Kingdom's uni-portal system, the RCVS gate-keeping role in professional entry gave primary control over veterinary professional development. The comparative perspective opened up by Table 1 shows that, in the case of the veterinary profession, the occupational association—*not* the qualifying association—has been the more commonly important organizational form. The federated and settler-colonial nature of the United States, Canada, and Australia, and the lack of population in these countries, acted against the early development of qualifying bodies. What is characteristic of these countries is the establishment of state or national licensing boards under Veterinary Surgeons Acts to determine qualifications to be registered as a veterinarian.

The United Kingdom Royal Charter of 1844 declared that the practice of veterinary medicine and science was a profession, and that members of the College were to be distinguished by the title of »veterinary surgeon.« Carr-Saunders and Wilson (1964, 125–32) observed that this was one of the few examples of an attempt to legislatively define an occupation as a profession. Provision was made for the election of a council and officers. The single most important section of the Charter was that dealing with the examination of all students to gain membership of the RCVS. After a long period of negotiation within the profession, the 1881 Veterinary

Surgeons Act set up a statutory register, prohibiting unqualified practitioners from using any title, addition, or description stating that they were specially qualified in the medical and surgical treatment of animals. The RCVS continued to be the controlling body of entry into the profession. Even after the passage of the British Act in 1881 many persons, not formally veterinarians, continued to practice.

The mid-nineteenth century problem of widespread epizootic disease in European animal herds and flocks stirred various governments to action to protect their populations; just as, a century earlier, similar epidemics had led to the establishment of veterinary schools in the first place. In Britain, the government veterinary service was set up in 1865–1866 (MAF 1965). In the United States, this was the impetus that led to the first meeting of the United States Veterinary Medical Association in June 1863. Other concerns were with veterinary education, obtaining veterinarians, and military veterinarians's status. The new association advocated the founding of the Bureau of Animal Industry, established in 1864.

In 1898, this association was renamed the American Veterinary Medical Association and was extended to include the Dominion of Canada (Veterinary Record 1945). Although Canada had earlier local professional groups meeting, only in 1948 did government legislation constitute the Canadian Veterinary Medical Association. Prior to this, a national association was restricted by the 1867 British North America Act giving each province autonomy in certain matters—one being education, and a second being the right of professional groups to have their own governing associations. Many attempts were made to have a national association and one was actually formed in 1923 but failed after two years of action (Pers. Comm. C.A.V. Barker, University of Guelph, Ontario). A Canadian government veterinary department was established in 1884.

In Australia in 1888, a private veterinary school under William Kendall commenced. Before this, in 1880, an Australasian Veterinary Medical Association was formed with a score of members, but lasted only two years (Hindmarsh 1962; Pers. Comm. J. C. Beardwood, Archivist, Australian Veterinary Association). A national association was nearly formed

just prior to the 1914–18 war, but was delayed to 1921, although there had been veterinary congresses since 1907.

It is interesting to note the cross-influence between the antipodean countries, South Africa (Diesel 1963), Australia (Hindmarsh 1962), and New Zealand (Laing 1974), all establishing professional associations in a three-year span in the early 1920s. In all three countries before 1900, only a handful of formally qualified veterinarians had emigrated from the United Kingdom. Farming populations were relatively sparse in these settler societies. Each country had a strong economic dependence on Britain. It was not until government veterinary departments were set up in these countries that veterinary professional expansion and development really began. Individual veterinarian administrators played major roles in this development: Gilruth in New Zealand, Kendall in Australia, McEachran in Canada, and Theiler in South Africa. Indeed, in all of the nations included in this comparative analysis, this role of the government, as a direct consumer of veterinary services and employer of veterinarians, was of major importance for veterinary development. It can be argued that such influence was of greater organizational and developmental significance for veterinary professionalization than the formation of the professional associations themselves.

Discussion and conclusion

From the present survey of veterinary professionalization it is possible to make some observations about the value of the historical-comparative approach and the limitations of Wilensky's model in explaining this process—particularly in light of what Mennell (2010) called »civilizational time,« and what Beilharz and Hogan (2012) refer to as »the civilizational long-run.« The implication that the professionalization sequence is well-defined is not borne out, even in the United States; and less so when the model is applied to other countries where fewer or extra steps are of equal importance for the development of the profession, even in restricting analysis to one occupation. Only Australia showed a veterinary professionalization pattern in full agreement with Wilensky's ordering, and it is hardly the case that these are the only significant events in the profes-

sion's history in Australia. The near-failure of Melbourne and Sydney veterinary schools for lack of student intake in the first three decades of the twentieth century undermines any simple uniformity gained by only using commencement dates of selective events. Similarly, there is more to be learned from the unsuccessful United States veterinary schools in the mid-nineteenth century.

By providing a chronological ordering of important steps in occupational development, Wilensky attempted to progress beyond the reifying effects of a simple trait approach through introducing the notion of time sequence in shifting from occupation to profession. The notion of causality is not, however, particularly developed. The comparative limitations of the model, even in the United States, which shows 36 deviations out of 126 dates means that the idea of causation is no stronger than a predisposition. A variety of comments throughout the discussion of the historical data can be seen as anticipating the three points of critique made below in this section of functionalist notions of professionalization in contrast to an historical comparative approach. These are: the lack of comparative perspective; inattention to cultural iteration; and the historical institution of government veterinary departments.

Ascione (2013, 1) observes that, »modernity remains the privileged theoretical frame and narrative for long term processes at the global scale.« The present discussion contributes to debates about singular or plural forms of modernizing processes but entertains a risk in doing so, since:

> multiple modernities is widely accepted as the most comprehensive framework to cope with the challenges to Eurocentric modernity born as a consequence of pressures to recognize non-European historical experience at a global scale as alternatively modern. (Ascione 2013, 5)

The current discussion could be read as simply providing evidence in support of this, no mean achievement in itself. However, as Ascione (2013, 6–7) argues, such an approach to »processes of exchanges among entangled geo-historical locations« inadequately problematizes the notion of »Europe« and Eurocentric socio-history; a key element of which is an

implicit exceptionalism of Europe that historical tracing and re-reading of colonial settler veterinary narratives, opens up.

The proposal here, however, is that this challenge to existing data need not be read in this way. The evidence can indeed be re-read, though that entails stepping outside dominant historical and sociological framings. The problem is, however, that »non-[Euro]centrism is lacking, for the most part, a theory and explanation of European adaptiveness« (Hobson 2012, 25; in Ascione 2013, 8). This argument is that it is the perspectival level not the empirical level of analysis that has been determinative in the earlier readings noted above, revealing a process of »unthinking modernity« (Ascione 2013). Professionalization needs to be read as more than conjunctive with an essentialized concept of Europe. Without pursuing Ascione and Hobson's lines of reasoning further here, their indication of the task to be done is supported by re-inspecting the inadequacy of steps conventionally claimed to explain Anglo-settler veterinary professionalization and re-reading the evidence anew.

Comparative perspective

The chief criticism in the present context is that Wilensky's model lacks compelling relevance outside the country where it was developed, namely, the United States. Millerson's research showed the presence of several types of professional organizations exerting differential amounts of influence on the historical formation of professions in the United Kingdom. It is evident here that the veterinary profession participated in the pattern of Royal Charter patronage, establishing the RCVS in 1844, followed later by a professional association in 1881. The two dates in one cell in Table 1 indicates such a pattern does not readily fit the Wilensky scheme.

Johnson (1972) cautioned against uncritical use of the notion of professionalization that arises from lack of exposure to comparative settings. From detailed historical-comparative examination of professional development in a range of colonies of the former British empire, he concluded there were basic differences in the pattern of their occupational

emergence in contrast to the developmental process that professions followed in the United Kingdom itself. On this point of imperial connection, it is significant that Pocock (2005) describes the United States as Britain's first Atlantic empire. Still using Pocock's terminology, the keys to unlocking historical differences affecting the veterinary profession and other professions in Britain's second empire are the imperial, political, and economic networks of which the United Kingdom was the centre and these colonies the periphery (Johnson 1973, 1978). Largely because of this, but not appearing in internalist accounts of professions, there is a considerable time-lapse before the establishment of professional associations in these countries. Later establishment, in turn, meant a modified professional structure in these countries because of other social changes of modernization such as continuing industrial development, emerging white-collar classes, and the widespread presence of large bureaucratic organizations.

Johnson did not write about the veterinary profession, but he lists (1972, 28–29) a number of contrasts between the United States and United Kingdom professionalization sequences that show the limitation of the model, including for instance, the role of universities in professional education, and the functions of professional associations. »It is clear,« he says, »that the sequence outlined here by Wilensky (and this is true of Caplow [1954] also) is historically specific and culture bound.« While most of Johnson's work involved comparative analysis of professionalization in the United Kingdom and the former British colonies, differences of a similar nature are also found between both the United Kingdom and the United States, and former colonial nations and contemporary underdeveloped countries. Further detailed work in examining the socio-economic developmental pressures in these Anglo societies influencing professions and other institutional forms can be found in broad developmental analyses in Belich (2009) and Weaver (2006). As noted at the start, the colonial experience outside these Anglo-settler societies can be seen as qualitatively different (Davis 2006, 2008; Gill 2012) in Weaver's analysis, chapter one in particular, and also in the specific veterinary histories of other authors.

More recently research in the sociology of professions has highlighted variations across many societies. Krause's (1996) analysis of four professions (medicine, law, engineering, and university teaching) in five countries provides, like Johnson, a challenge to any simple linear professionalization formula, although it does not follow the European occupation-to-profession model. Professional change interacts with actors and interests, including the state, in the particular circumstances different within each society (e.g. Evetts 1998). More recent critique from Henriksson, Wrede, and Burau (2006, 176) for example, continues to document the inadequate comparison. Unfortunately, implicit use of functionalist professionalization assumptions in occupational studies continues.

Cultural iteration

From a post-professional perspective it makes better sense to read the data as having provisional and interactive dimensions as it now sits in summary in Table 1, not making presumptions of individual linear evolution. This form of »cultural traffic,« to use Beilharz and Hogan's (2012) terminology, means not only can Wilensky's model be critiqued for its lack of comparative perspective, but within the multiple paradigms of sociological theory today, even such a comparative difference is not absolute. In key ways, the awareness of, and copying from, other nations is recursive—feeding back into the practices and institutional arrangements around professions by the perceiving and emulating societies. Professionalization changes as it travels. Such a statement is not automatic recapitulation, in fact, »palingenesis« is the biological term Ascione (2013) uses in debating this. The present data, even though dealing with individual historic events, is not discrete and independent; events are interleaved, one event influencing the occurrence of another nationally and internationally through imperial and globalized information networks. Thus, even within this settler-society grouping, these differences go beyond contradicting adaptations to European modernity or the »adaptiveness« of Europe, to start narrating the construction of Euro-modernity in relation to the implicit and invisible non-European »others.«

In the data presented here at least three identifiable cultural-political feedback mechanisms can be discerned: (1) Except for the United States politically (and less so, economically), all the other Anglo-settler societies in the table existed in formal metropolitan-peripheral relationships within the United Kingdom's imperial network over the past two centuries. They fed the need for officials, technical experts, production of raw materials, and governing cadres, ultimately affecting veterinary development, along with other professions and disciplines, as mechanisms of imperial governance. (2) Most societies here have another iterative loop of influence and response in their federal-state hierarchies. Copying or restraining events in one part of society is inherent in the functioning and regulatory arrangements established even before considering the diffusion of ideas and practices in meetings, reports, communications, and policy initiatives. (3) Inter-country interactions are seen in a variety of events and processes noted here: establishing veterinary schools in response to widespread disease; establishing government agricultural departments or veterinary divisions; legislative permission for professional closure and variations in the modes of closure; later willingness to fund training schools; setting up professional associations (or obtaining a Royal charter), all show awareness of (a) the activities of other national societies, and (b) the professionalizing efforts of other groups. In Table 1, the succession of eras within which full-time veterinary work developed (column two), and subsequent patterns across the Table which set out *when* specific events occurred, can be re-read as those societies having had similar responses to similar issues—at least partly because they were each *reading* the actions of others in their own modernizing social and anthro-animal environments.

Government veterinary departments

The single most important factual omission in Wilensky's professionalization sequence of veterinarians in these settler societies is the role of the state in the account. Every national instance witnessed establishing a government organization for core veterinary functions of disease management and control, supervision of animal slaughter, and human hygi-

ene protection. The action of establishing government animal health management agencies is as relevant to English-speaking countries as to European states and nations elsewhere. Conceiving professions as essentially free agents created through a naturalized professionalization process is not evident in the data shown in Table 1. The new Veterinary Medical Association of the United States was key in promoting establishment of the United States Bureau of Animal Health in 1863. The United Kingdom British Veterinary Association was formed nearly twenty years *after* the formation of the Ministry of Agriculture, Fisheries and Food (MAF) in 1865; in New Zealand, no professional association existed until 1923, thirty years *after* the government Veterinary Division was formed in 1893. Further, New Zealand shows a significant governmental role in the »Vet Club« system (Burns 2007).

Today, in many respects, the veterinary profession in these countries conforms to the Anglo-American ideal of an independent, self-regulating profession. However, historically, the role of the state in »calling into being« a nascent professional group, and legitimating and promoting veterinary oversight of national animal populations, is a major component in the development of veterinary work. The state agencies acted as substantial employers, allowing veterinarians to investigate, do research, and recommend control and management practices. Such »patronage,« to use Johnson's (1972) term, provided critical impetus to occupational development. Wilensky's sequence of steps, however, ideologically brackets-out the role of the state, and stands in marked contrast to the work of contributing writers like Burrage and Torstendahl (1990a, 1990b), and others in which the role of the state is considered more evenly distributed. Hellberg's (1990) description of veterinary work is the obvious case in point illustrating this.

Continuously, across the entire comparative veterinary history, the state has been central in veterinary services: (1) epizootic border control, late eighteenth century; (2) establishment of eighteenth-nineteenth century veterinary schools; (3) responding to disease out-breaks via government veterinary departments later in the nineteenth century; and (4), in later

stages of Table 1 coverage, major disease eradication programs in Europe and the United States (e.g. tuberculosis) were government-led initiatives (Olmstead and Rhodes 2004).

Data from a restricted comparative group of countries has been gathered here to provide insights undercutting the functionalist model's empirical and theoretical assumptions. Its theoretical inadequacy has come to the surface in this investigation, particularly in the narrow comparative applicability of the model, the explanatory limitations of similarities and differences, and how poorly it reveals the empirical data. Thus, while Wilensky's idea has an attraction in providing a framework to gather specific evidence on occupational professionalization, the inadequacy of the model as a theoretical explanation of professions is apparent in veterinary professionalization. Even viewed as descriptive, rather than analytic, it reflects nationalist, modernist, and cultural discourses selecting steps used in the model to read the data. Interpretations are read out of the model, rather than deriving these from proper attention to the historical data, or from a broader-based empirical or historical-theoretical understanding of modernity (Wagner 2008, 2010). In order to contextualize a more evidence-based view of veterinary professional development, an historical-comparative landscape is necessary.

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