Veterinary expertise

Justin Armstrong

PhD

2011

Centre for Rural Economy,
School of Agriculture, Food and Rural Development
Newcastle University
NE1 7RU

Abstract

This thesis is about veterinary expertise, with a focus on the farm/large animal sector. It explores how vets and the profession express expertise beyond medical knowledges and technical competencies. Drawing from rich, detailed ethnographic case studies of UK vets working in the rural sector in a variety of roles (e.g. private practice, government, education) the thesis offers new understandings of professional expertise and Aesculapian authority – the most powerful authority awarded by society to those who heal. The main argument is that veterinary expertise cannot be easily defined or compartmentalised as it is fluid and at times contested and means different things to different people at different times and places. Furthermore, in analysing veterinary expertise I found it necessary to understand the relationship between veterinarians' notions of general practice and specialisation. Through historical and empirical evidence my research has found two main reasons to explain why veterinary specialisation appears to be underdeveloped. First, at the professional level, veterinarians strongly assert the primacy of general practice and contest the notion of veterinary specialisation as divisive. Second, at the individual level, many veterinarians work in very defined areas of practice that may be considered to be specialised. Yet they maintain they are still general practitioners. In light of these contradictions my thesis suggests that veterinarians should be conceptualised as 'poly-specialists'. Theoretically the thesis develops the notion of veterinary Aesculapian authority and Goffman's 'dramaturgical perspective' to understand the veterinary 'performance'. The thesis argues that the authority and power of the individual and profession is one aspect of veterinary expertise but also the ways in which vets interact in different physical settings (the performance in front and back stage settings) is important. Exploring the veterinary performance reveals the fluid nature of their expertise as it varies according to the physical setting, is related to personal characteristics and the way they construct, maintain and express their Aesculapian authority.

Acknowledgements

I wish to thank the following people for their support, advice, guidance and perseverance with this project:

Dr Andrew Donaldson FRGS, Newcastle University

Professor Philip Lowe OBE, AcSS, Newcastle University.

Thank you both for your prodigious efforts in making me into a sociologist and for putting up with me for four years.

To Megan Power and Paul Dray, Vets and Veterinary Services Team, DEFRA.

Thank you both for your constant support and interest in this project. Also for allowing me to pick your brains and develop an understanding of the complexities of veterinary service policy making.

To the ESRC and DEFRA for making this PhD possible

To all the vets, farmers and other interested parties who gave up their time and were generous with their expertise and knowledges. Especially to Charles Devere FSA and Peter MacDonald, Animal Health

With special thanks to Malcolm Sinclair and Archie Murdoch for their generosity and interest and who really let me see what makes a vet tick. Also, Archie Murdoch for his day one interest in the notion of veterinary sociology and the many, many times we have met, spoken and emailed each other on a wide issue of veterinary matters.

A very special thanks goes to Professor Peter Atkins of Durham University. When I was an undergraduate at Durham Peter was one of a minority of people who believed that I was capable of producing a PhD and he went out of his way to get me onto one. Cheers Peter.

Finally I thank my wife for her encouragement and support throughout this journey

Contents

Abstract	**2**
Acknowledgements	**3**
Contents	**4**
List of Tables	**5**
List of Figures	**5**
Acronyms and Abbreviations	**6**

1	**Introduction**	**7**
2	**Researching vets**	**14**
	2.1 Introduction	**14**
	2.2 Methodological approach: ethnography and autoethnography	**15**
	2.3 Methodological techniques: doing the fieldwork	**18**
3	**Professional expertise and authority**	**27**
	3.1 Introduction	**27**
	3.2 Understanding expertise	**28**
	3.2.1 Practical experience, knowledge and the professional expert	**30**
	3.2.2 The professional expert	**35**
	3.2.3 Linking 'expert' and 'lay' knowledge	**36**
	3.2.4 Socially conferred expertise	**39**
	3.2.5 Distant expertise	**41**
	3.2.6 Value-added expertise	**43**
	3.3 Expertise as power, authority and legitimacy	**45**
4	**Specialisation and the professions**	**54**
	4.1 Introduction	**54**
	4.2 Specialist and niche areas in veterinary medicine	**56**
	4.3 A comparison of professional specialisation	**65**
	4.3.1 Discussion of professional specialisation	**80**
	4.4 Formal routes into veterinary specialisation	**84**
	4.4.1 The British Veterinary Association	**85**
5	**The working day in the life of a rural vet**	**96**
	5.1 Introduction	**96**
	5.2 The day	**99**
	5.3 Reflections of the day	**120**
6	**The biography of a veterinary specialist**	**122**
7	**Veterinary performance**	**144**
	7.1 Introduction	**144**
	7.2 Understanding the veterinary performance	**145**
	7.2.1 Aesculapian authority	**145**
	7.2.2 Goffman's dramaturgical perspective	**148**
	7.3 Analysing the veterinary performance	**150**
	7.3.1 The 'frontstage' veterinary performance	**150**

	7.3.2 Revealing the 'Magicians' Code': 'secrets of the backstage performance	**157**
	7.3.3 The multi-media vet: the farm and other stages	**164**
	7.4 Aesculapian authority revisited	**170**
8	**Let sleeping vets lie: why vets contest the notion of specialisation**	**177**
	8.1 Introduction	**177**
	8.2 Contesting the specialist	**178**
	8.3 The primacy of the GP	**183**
	8.4 Defending the specialist	**190**
9	**Conclusion**	**196**
	9.1 Introduction	**196**
	9.2 'Don't upset the monkey': or my family and other experts	**197**
	9.3 Concluding comments	**204**
	9.4 Revisiting the research questions	**210**
	9.5 Considering the wider implications of the thesis	**214**
	References	**220**

List of Tables

2.1	**No of interviews with practising veterinarians and those in related professions**	**21**
3.1	**A typology of knowledge**	**31**
3.2	**Knowledge exchange**	**38**
4.1	**Comparison of veterinary specialisation**	**66**
4.2	**BVA specialist divisions**	**85**
4.3	**Comparison of the RCVS list of specialisms with the BVA distribution of specialist divisions**	**90**
5.1	**Equine services**	**97**
5.2	**Farm animal services**	**98**
5.3	**Small animal services**	**98**

List of Figures

3.1	**RCVS Coat of Arms**	**52**

Acronyms and abbreviations

AA. Aesculapian Authority
AH. Animal Health
AGV. Association of Government Veterinarians
ADAS. Agricultural Development and Advisory Service
AWSELVA. Animal Welfare Science, Ethics and Law Veterinary Association
BVA. British Veterinary Association
BVCA. British Veterinary Cattle Association
BVM & S. Bachelor of Veterinary Medicine and Surgery
BPTC. Bar Professional Training Course
BSE. Bovine Spongiform Encephalitis
CCDO. Community Clinical Dental Officer
CDS. Community Dental Service
CPD. Continuing Professional Development
DCVO. Deputy Chief Veterinary Officer
DEFRA. Department of Environment Food and Rural Affairs
EDT. Equine Dental Technician
EFRA. Environment Food and Rural Affairs
ESSG. Education Strategy Steering Group
FSA. Food Standards Agency
GDC. General Dental Council
GDP. General Dental Practitioner
GMC. General Medical Council
GP. General Practitioner
GVS.Government Veterinary Surgeons
LLB. Bachelor of Laws
LPC. Legal Practice Course
LVC. London Veterinary College
LVI. Local Veterinary Inspector
MAF. Ministry of Agriculture and Food
MAFF. Ministry of Agriculture Food and Fisheries
MHS. Meat Hygiene Service
MMCP. Modernising Medical Careers Programme
MSc. Master of Science
NFU. National Farmers Union
NVMA. National Veterinary Medical Association
OV.Official Veterinarian
RAVC. Royal Army Veterinary Corps
RCGP. Royal College of General Practitioners
RCVS. Royal College of Veterinary Surgeons
RVC. Royal Veterinary College
RSPCA.Royal Society for the Prevention of Cruelty to Animals
SDO. Senior Dental Officer
SHO. Senior House Officer
SVS. State Veterinary Service
SPVS. Society of Practising Veterinary Surgeons
TPC.Total Patient Care
VLA. Veterinary Laboratory Agency
VMD. Veterinary Medicines Directorate
VSA. Veterinary Surgeons Act

Chapter 1

This thesis is about veterinary expertise in the farm and large animal sector. Whilst acknowledging that issues of expertise are involved in the wide variety of sectors in which veterinarians work, for example, small animal, government, charitable/voluntary and education, this thesis deals exclusively with veterinarians involved in the large/farm animal sector and has little to say about the role of small animal or pet animal veterinary expertise and the relationship between the vet, animal and client (see Adams et al, 2004; Frankel, 2006). The focus on farm/large animal veterinary expertise is justified because the notion of veterinary expertise in the UK rural sector became of critical interest when very high profile public health crises such as BSE exposed the veterinarian's role in this area to scrutiny and it was revealed that vets and their expertise were sidelined (Bickerstaff and Simmons, 2004; Wilkinson, 2007; Woods, 2004).

Furthermore, at government level, the question of what constitutes veterinary expertise arose from the Environment, Food and Rural Affairs (EFRA) Select Committee Report (2003) in which concerns were expressed for the future of the rural veterinary profession and the sustainability of certain veterinary services in the farm / food animal sector. The report stated that there had been a 29 per cent full time equivalent (FTE) reduction in the food animal component of veterinary workload since 1998. There has been a shift towards companion animal care at the expense of other fields of activity (Lowe, 2009: 20). The profession was once almost exclusively male, yet now female veterinary graduates account for 79 per cent of the profession (RCVS 2010). Coinciding with this demographic change has been the growth of companion animal practice resulting in a male: female ratio in this part of private practice of 4:5 in 2006 (Lowe, 2009:21). This has raised fears that the rural veterinary profession may not be able to meet the demands of new animal health, welfare and food safety policies introduced by the New Labour government.

More recently, the 'Lowe Report', *Unlocking potential: a report on veterinary expertise in food animal production* (Lowe, 2009) concluded that although there was no overall

short fall in supply of rural veterinarians - the veterinary professional register swelled from 7,948 in 1966 to 21,622 in 2006 (Lowe,2009: 19) as older and experienced food animal vets retired from practice in the future, there would be a need to replace them with vets *willing* and *able* to meet the changing demands and requirements of the food animal producers. Further, the report concludes that the veterinary profession on its own cannot overcome the marginalisation of food animal veterinary medicine and needs the active and committed support of its major customers to achieve this. However, neither of these reports, because of their policy focus, thoroughly interrogate the notion of veterinary expertise in the large/farm animal sector; they accept it as a given.

Research aims and questions

The purpose of this thesis is to interrogate and explore the role and constitution of veterinary expertise, with a particular focus on the farm/large animal veterinary sector in the UK. The emphasis is expertise from the food/large animal vet perspective and not the small animal vet, the farmer, animal or para-professional.

The research aim is met by three research questions:

1. What makes up veterinary expertise apart from scientific and technical knowledge?

2. How does veterinary expertise differ between the different roles that vets play?

3. What holds the veterinary profession together?

In order to answer these questions I initially considered three analytical sub-questions, borrowed from Dorothea Orem (see Orem, 1979/2004; 2001) the nursing scientist who strove to understand the nursing profession. She initially asked, "What are nurses? What do nurses do? Why do they do it?" in order to develop *Orem's Nursing Systems Theory*

which considered the responsibilities of nurses; the roles of the nurse and the patient; rationales for the nurse-patient relationship and the types of action needed to meet the patient's demands. Following this example I began by considering the same questions in relation to vets:

a) What are vets?
b) What do vets do?
c) Why do they do it?

Vets, like nurses, form complex relationships with their patients. Unlike nurses and doctors (excluding paediatrics) for vets there is a third party involved in the relationship – the animal owner. These relationships are dynamic and at times unequal when one party holds the power and authority. It is these complex and dynamic relationships that this thesis is interested in.

Contribution of the thesis

This is the first systematic study to provide a new understanding of vets, the veterinary profession and veterinary medicine from a sociological perspective. The sociology of veterinary medicine is thin and it is the historians who have made more of a contribution to the sociology of vets than the sociologists have. I have read with great interest several histories of the veterinary profession ranging from Fisher (1993, 1998), Gardiner (2010), Hardy (2002, 2003), Pattison (1984), Pugh (1962) and Woods (2007). These veterinary historians have contributed to the general understandings of what it is to be a vet and have helped to inform the sociological understandings of veterinary expertise that this thesis demonstrates. Many of these histories come from a veterinary background so there is a reflexive sociological aspect to what they are saying.

Although there is some recent research on veterinary medicine from the social sciences[1], mine is the first to investigate the sociology of the veterinary profession, with a particular focus on those working in the food/large animal sector through the lens of expertise, authority, specialisation and generalisation. Therefore, my research is unique in that it is the first investigation into the sociology of vets and veterinary medicine from the perspective of vets working in the large and farm animal sector.

Conceptually, the thesis develops the notions of Aesculapian authority and specialisation in relation to veterinary expertise and I argue that, although most vets in practice may consider themselves to be general practitioners, they are in effect 'poly-specialists' and this both serves to unite the profession and refute the notion of singular specialisation. The thesis will explain why Aesculapian authority and specialisation are useful in understanding veterinary expertise and what was wrong with traditional notions of authority, specialisation and general practice.

My main argument is that veterinary expertise cannot be contained solely in scientific and technical knowledge, ability or competency. I will demonstrate that the expression of veterinary expertise is dependent upon certain social constructs and relationships. Further, I will show that veterinary expertise is not a fixed given but is differentiated and more fluid than previously thought, and varies across the different roles that vets play.

Empirically the thesis draws on in-depth and serial interviews with vets from a range of sectors including, rural mixed practice vets, veterinary educators, vets in government service such as the Meat Hygiene Service (MHS), Animal Health (AH), Veterinary Medicines Directorate (VMD), Veterinary Laboratory Agency (VLA), Food Standards Agency (FSA) and the Deputy Chief Veterinary Officer for the UK. In addition, the thesis draws from observation and shadowing of my two main case studies, a veterinary specialist and a farm animal general practitioner.

[1] For example: Enticott and Franklin(2009) who looked at the technical aspects of expertise in relation to biosecurity and bovine tuberculosis; Lowe (2009) who conducted a comprehensive socio-economic assessment of the veterinary profession in the period 2007 to 2009 and Swabe (1999, 2000) and Wilkie (2010) who reflected upon vets within the context of animal-human relationships

Thesis structure

Chapter 2 is the methodology chapter. Chapters 3 and 4 are the theoretical chapters. Chapters 5 and 6 provide the empirical narrative as case studies. Chapters 7 and 8 provide the empirical analysis and chapter 9 offers the key findings and conclusion.

Chapter 2: Researching vets. The aim of this chapter is to discuss the methodological approach and techniques used in the research. This involves a critical reflection of the choices made and the merits and limitations of these methodological decisions.

Chapter 3: Professional expertise and authority. The aim of this chapter is to critically examine the notions of expertise such as experience, power, authority and legitimacy and socially constructed notions of expertise and discuss them in relation to humans and veterinary medicine within the differing spheres of practice. Furthermore, this chapter offers insights to understand how veterinarians construct, develop and maintain their professional authority. This chapter will examine existing notions of expertise and authority such as rational and legal and how it applies to vets but will also introduce and develop the notion of Aesculapian authority. Aesculapian authority is said to be the most powerful authority that one can posses. It was originally applied only to doctors and its historical roots can be traced to ancient Greece and Rome. It is claimed by philosophers to be an essential authority that doctors have simply for being healers. The philosopher Bernard Rollin developed this authority and applied it to certain types of vet, for example, small animal vets. He too claims it to be natural authority. This chapter will explore and begin to challenge Rollins notions on the nature of veterinary Aesculapian authority and argue that to maintain this authority is a struggle as it is contested and challenged and in some situations only partly realised. It will argue that veterinary Aesculapian authority is differentiated depending on the personality of the vet and the specific role that the vet plays. The following empirical chapters will critique and develop further the notion of Aesculapian authority.

Chapter 4: Specialisation and the professions. The aim of this chapter is to explore and gain better understandings of how and why the professions that neighbour veterinary medicine have constructed themselves into two broad groups, generalists and specialists. It will investigate why veterinary medicine has been very slow in developing a specialist division. It will discuss the contested nature and acceptance of veterinary specialisation (who and what is accepted as a specialist) from groups within the profession such as the BVA and the RCVS.

Chapter 5: A working day in the life of a rural vet: the example of Malcolm Sinclair. This chapter draws on observations made whilst shadowing Malcolm Sinclair a 'General Practitioner' in a mixed rural practice. The aim is to explore in depth how Malcolm performs his role as a rural vet with many guises. Malcolm is a very charming and charismatic vet who is well respected within his local community. Although Malcolm is very much opposed to specialists other than very niche areas and he maintains very strongly that he is a GP he does however, perform in a very designated area of veterinary practice. This could be considered to be a form of specialisation.

Chapter 6: The biography of a veterinary specialist: the example of Archie Murdoch. This chapter draws on a rich, detailed empirical study, including serial interviews and participant observation of a veterinary specialist working in the farm sector. The aim of the chapter is to explore in depth the formation and role of a veterinary specialist in the farm sector. The chapter discusses veterinary specialisation from the view of Archie Murdoch. His notion of specialisation is that of the 'public veterinarian' someone who engages with a wide audience not limited to veterinarians and some one who acts as much as an educator and ambassador as a 'hands on' clinician. Archie Murdoch is a pioneer of farm animal veterinary specilisation and he has developed a veterinary model of specialisation different from the human medical model, a model that has been adopted by other vets particularly in the small animal sector.

Chapter 7: Veterinary performance. This chapter aims to extend the understanding of 'veterinary performances' by focusing upon the variety of veterinary roles encountered during the research. The chapter begins by developing the notions of Aesculapian authority (Paterson, 1957; Siegler and Osmond, 1974; Johnson, 2003; Rollin, 2002, 2006) and the dramaturgical perspective (Goffman, 1959) in order to understand the expressions of expertise observed in the range of veterinary performances. The chapter then moves on to the analysis and discussion of veterinary performances and draws upon the empirical findings.

Chapter 8: 'Let sleeping vets lie': why vets contest the notion of specialisation. This chapter will explore and discuss through empirical data the broader issues surrounding veterinary specialisation and some of the reasons why many vets contest it. Many vets consider themselves to be GPs yet perform in defined areas of practice and are reluctant to describe themselves as specialists. Thus, the chapter begins by exploring the notion of the veterinary general practitioner and will discus why veterinarians maintain the primacy of general practice before moving onto the veterinary specialist.

*Chapter 9: Conclusion***.** The first section of this concluding chapter discusses 'alternative expertise' and draws from my own experiences and family to illustrate the notion. The second part of the chapter provides concluding remarks upon the thesis findings. The third section revisits the research questions in turn and considers them in light of the theoretical developments and empirical engagement made in the thesis. The final section discusses the wider implications of the thesis and will be of particular interest to the veterinary profession and policy makers.

Chapter 2

Researching vets

2.1 Introduction

The research was funded by the Economic and Social Research Council (ESRC) and the Department for Environment, Food and Rural Affairs (DEFRA) (specifically the Animal Health and Veterinary Services Directorate) as a 1 +3 CASE studentship therefore the focus was pre-determined as the large / food animal veterinary sector. The CASE partners were interested in the large/food animal sector as this is were the problems were at the time such as the high profile public health crises such as BSE mentioned in Chapter 1. In the original proposal, which was already written for me, the main empirical element of the study was informed by a case study ethnographic approach of vets working in different roles within the large/farm animal sector. Case studies were to be informed by in-depth serial interviews to collect personal/work biographies complimented by shadowing each participant at work to observe the various interactions, knowledges and expressions of expertise involved in the vets' roles. As I began the fieldwork – which was conducted in the year between 2008-2009 - I saw no need to change the methodological approach suggested in the original research proposal as an ethnographic approach was my preferred way of gaining an understanding of veterinarians working in the large/farm animal sector. However, as time went on it became clear that I was not a 'detached researcher' (Cook and Crang, 1995). Indeed, as you read on you will realise I am in this thesis as much as the vets are. Therefore, the aim of this chapter is to discuss the choices made and limitations of the methodological approach (ethnographic and autoethnography) and the techniques (case studies, interviews and shadowing/participant observation). It also discusses the ways in which the empirical data was assembled and analysed and considers the ethical issues of confidentiality and anonymity. It begins with some brief reflections on the relationship with the CASE partner – DEFRA.

The relationship with DEFRA

My non-academic supervisors at DEFRA were a vet and a civil servant working on veterinary issues including the Veterinary Surgeons Act. The relationship with DEFRA and the fact that my research timeframe coincided with the Vets and Veterinary Services Working Group, 2007 – 09, chaired by my supervisor Professor Phillip Lowe OBE, gave me excellent access to a wide range of vets, farmers and government officers involved in food animal veterinary provision. The working group met on six occasions at venues throughout the UK. I was present at three as an observer. This was a great help in being able to network amongst a wide range of interested parties who all expressed an interest in the research and provided me with contacts. In addition, many of those who I spoke to gave 'off the cuff' opinions on veterinary issues and certain vets. My relationship with DEFRA was positive. They were always interested in the research and provided me with considerable information of the practicalities and difficulties in policy making. I made a number of visits to DEFRA HQ in London were I was received with enthusiasm. These visits also led to several introductions and interviews such as the Deputy Chief Veterinary Officer, and the Chief Executive Officer (CEO) of the Veterinary Medicines Directorate. Also, my CASE supervisors from DEFRA have attended a number of workshops at Newcastle University, such as the Vets and Social Sciences Collabatory, where their input was cogent and helpful. In all, DEFRA have been good partners as they have not interfered with the research but have always given informed opinion and advice. They also invited me to address the Government Veterinary Surgeons / Association of Government Veterinarians (GVS/AGV) annual conference at Cardiff University during June 2008. I presented a discussion on why vets are important to the social sciences. It was well received and raised my profile amongst the profession. I also made a number of useful contacts.

2.2 Methodological approach: ethnography and autoethnography

Ethnography was the original methodological approach in the CASE proposal and this suited both me and the project as a way of immersing myself in the veterinary contexts to

observe and understand the everyday ways of living and working in the large/farm animal sector. An ethnographic approach helped me to answer the research questions and sub-questions (see Chapter 1) as I was able to get a richer understanding of the various things that vets do.

What distinguishes ethnography from the growing range of qualitative research approaches is its primary concern with fieldwork involving a range of methods, with participant observation given a particular emphasis (Atkinson and Hammersley, 2007). The original research proposal suggested ethnographic methods of participant observation (shadowing) and interviews to inform the case studies and I saw no reason to change this (see Section 2.3 for discussion of case studies, shadowing and interviews). There are criticisms of ethnographic methodologies from those who adhere to the objectivity of the 'detached researcher' (Cook and Crang, 1995) and who question the subjectivity, validity, truth and generalisability of ethnographically generated empirical research (Spry, 2001). Counter-arguments assert that 'objective, detached research' "privileges the researcher over the subject, method over subject matter and maintains commitments to outmoded conceptions of validity, truth and generalisability" (Denzin, 1992:20). The virtue of ethnography - as revealed in reviews of the approach - is the flexibility of variegated methods that can illicit different emphases and nuances and be responsive to local circumstances (Atkinson et al, 2001, Atkinson and Hammersley, 2007). This was especially important to me when interviewing and/or shadowing vets working in different contexts e.g. private mixed practices, the specialist consultant, the educators and government vets. It was important to study the vets' actions and listen to their accounts in their everyday setting and not one created by me.

Autoethnography

Autoethnography developed from post-modern interpretations of ethnography (Wall, 2006) and includes in its rubric reflexive ethnography (see Davis, 1999), personal narratives, lived experiences and critical autobiography (Ellis and Bochner, 2000; Spry, 2001). Autoethnography involves a viewpoint whereby the researcher is a salient part of

the research process (Denzin, 1997) – in other words the interacting 'self' is reflected upon and becomes part of the research. Autoethnographers argue that self-reflexive critique upon one's positionality as researcher inspires readers to reflect critically upon their own life experience, their constructions of self, and their interactions with others within sociohistorical contexts (Ellis and Bochner, 1996; Goodall, 1998; Spry, 2001).

The reason why I chose autoethnography – or, more accurately, why it chose me – is probably because of who I am. What I mean is that I have grown up with books and been heavily influenced (and still am) by the likes of Orwell, Steinbeck and Green and above all I am a writer who wants to write about what I see and what I and those I am observing experience – often passionate, always emotional. Effective and good ethnography (Spry, 2001) involves well crafted writing (Denzin, 1997) that is emotionally engaging (Behar, 1997; Ellis, 1997; Ronai, 1992), as well as being critically self-reflexive of one's sociopolitical interactivity (Spry, 2001). Also, good autoethnography uses relational language to create a dialogue between the reader and author (Goodall, 1998) and is a provocative weave of story and theory with a tale being told (Denzin, 1992) – there is a personal narrative. Therefore, autoethnography suited both me and the way the thesis developed, and was especially valuable during the writing up stage as you will soon see in later chapters.

During my fieldwork 'I' was very much part of the research process. I constantly reflected upon my position in each veterinary context and realised that my personal and work history was contributing to the way in which I thought about vets and asked questions. My personal and work history was perhaps more of an influence than the literature I was reading at the time. As you will read in later chapters I come from what could be termed a medical and veterinary dynasty. I have been a veterinary client for more years than I can remember and I was a nurse for twenty years. An autoethnography approach allowed me to encapsulate my socio-cultural histories in relation to the contexts within which I was participating. A personal narrative framed by theoretical and empirical materials opens up the possibilities and can include knowledges and perspectives that would otherwise be hidden and not expressed. In this thesis it has not

produced an introspective work because the self is not the only source of material. Autoethnography also allowed me to put myself in the position of a veterinary client, a vet, a farmer, an animal, government and para-professional. For example, when shadowing vets I provided a client perspective as well as thinking and asking questions about being a vet, the animal and so on.

There are critiques of autoethnography and these include using the self as a source of data, being self-indulgent, narcissistic, introspective and individualized (Atkinson, 1997; Sparkes, 2000). The focus on biography is a concern for some because personal experiences are privileged and narratives are absent from social contexts (Atkinson, 1997). Other critiques include the subjective nature of autoethnography, perhaps based on one subject and question the credibility, dependability and trustworthiness of such material (Holt, 2003). Other common criticisms are that autoethnography based on evocative personal writing relies on a direct emotional response from the reader rather than offering analysis, grounding in theory or methodological rigour (Wall, 2006).

In considering these critiques of autoethnography I would say that this thesis does not use only the self as a source of data but draws from a range of interviews (see Table 2.1, Section 2.3) as well as in-depth case studies (one of which is a biography, see Chapter X). The self is evident throughout the thesis and this is acknowledged but the self is related to others and the social contexts and is grounded in theory. Well tried and tested ethnographic methods are used alongside autoethnography therefore ensuring methodological rigour. Analysis of the data followed common methods i.e. transcription and coding of themes. The writing style is emotional at times and deliberately so but I like to write and I can write well (or so I have been told).

2.3 Methodological techniques: doing the fieldwork

Making contacts

As mentioned above, the fieldwork took place over one year (2008-2009) and because I had just completed a Master's degree (i.e. 1+3 ESRC CASE studentship) I had already made some contacts in the rural veterinary sector in Northern England. For the PhD research I extended the strategy of 'casting the net' (Cooke and Crang, 1995) previously used in the Master's to include those involved in the UK rural veterinary sector – including private practice, government and educators as well as those working in related occupations. As before, this strategy worked well to establish initial contacts and make arrangements for interviews with those who were willing to participate. I chose the vets working in different large/farm animal sectors to ensure a wide net was cast and to gain as wide an opinion and experience as possible within the limits of an ethnographic approach. Vets working in the large/food animal sector were found using a combination of approaches: the Yellow Pages telephone directory, 192.com online, the Royal College of Veterinary Surgeons (RCVS) 'Find a vet'[2] online, personal introductions via DEFRA, the Vets and Veterinary Services Working Group and via recommendations from those who I interviewed i.e. snowballing. The majority were contacted by email and telephone initially and others by introduction.

In total I conducted thirty five interviews (Table 2.1). Not all the vets I contacted were helpful. Some said they did not have the time or interest and others were quite opposed to the idea of vets being scrutinised by an 'outsider' One vet in particular was offensive to me on the telephone when I told him I was a sociologist. He said "What has my work got to do with you? What would a sociologist know about veterinary science? What's the sociology of veterinary medicine? it sounds like crap" I tried to overcome some problems such as not answering emails by simply re-contacting them and re-wording my request, however, ten vets including two poultry specialists and a pig specialist just ignored them.

Conducting interviews

[2] http://www.rcvs.org.uk/FindAVet
On 'Find a Vet' you can search for a vet by postcode, town, location, practice name, for RCVS Accredited Practice and useful for me was the search engine for an RCVS Recognised Specialist.

In-depth interviews allowed me to develop relationships and trust. Most interviews lasted between one and three hours, and I started by eliciting biographical information before using open and closed questions on a range of pre-determined themes. However, in line with ethnographic work there was not a rigid structure (Atkinson and Hammersley, 2007) and I allowed the interviewees to elaborate upon their answers, encouraged them to talk and occasionally asked probing or controversial questions.

I interviewed twenty seven vets that were registered and currently practising and they worked in either private practice, for government or were educators working in UK veterinary schools within universities (see Table 2.1). One of the interviews I arranged with an educator working in the Glasgow veterinary school began as a single interview but then he suggested we went to the café where he introduced me to four of his colleagues so it became more like a discussion group. I interviewed more vets working in the government sector partly because being funded by DEFRA gave me some leverage into this area. Furthermore, as mentioned above the invitation to present at the GVS/AGV) conference plus being part of the Veterinary Services Working Group led by one of my supervisors (Prof Phillip Lowe) gave me the opportunity to network and become a known name and face in government circles and beyond. However, getting interviews with some government veterinary services such as the Meat Hygiene Service and Animal Health was slow because they requested lots of background information and had to gain permission from their superiors. Sometimes the interviews were not that illuminating as 'stock' answers were given. This, though, is common when conducting elite interviews as they often portray a particular image or political bias (Tansey, 2006; Richards, 2007).

In addition, I interviewed four farmers, a veterinary sales representative and three individuals related to the veterinary profession i.e. two non-vet civil servants and a RCVS specialist manager. The farmers were interesting in that they provided the client's perspective on vets and, at times, their shortcomings. The vet rep was very illuminating as he provided me with a great deal of inside information on how vets network and function that did not transpire from interviews with vets.

Table 2.1: Number of interviews with practising veterinarians and those in related occupations

Sector		**No of interviews**
REGISTERED/PRACTISING VETS		
Private		8
Government	Food Standards Agency Animal Health Veterinary Laboratories Agency Veterinary Medicines Directorate Meat Hygiene Service DEFRA Deputy Chief Veterinary Officer Northern Ireland Department of Agriculture	1 4 1 1 1 2 1 1
Educators	(Glasgow, Edinburgh, Royal Veterinary College – London)	7*
A: Total number of interviews (vets)		27
NON-VETS WORKING IN A RELATED AREA		
Farmers		4
Government – civil servants		2
Governing body	RCVS Specialist register	1
Veterinary rep		1
B: Total number of interviews (non-vets)		8
TOTAL NUMBER OF INTERVIEWS (A + B)		**35**

*This includes a discussion with a group of educators at Glasgow veterinary school

Choosing the case studies

In developing the relationships I had formed with the interviewees it became apparent that selecting two case studies as a focus for analysis would be most useful. A case study approach involves a detailed examination of a 'something'. Context-dependent knowledge and experience lie at the centre of the case study as a research approach and a case can be simultaneously extreme, critical, and paradigmatic (Flyvberg (2006). This approach was deemed appropriate as it allows an in-depth exploration of subtleties and intricacies (Denscombe, 2003). Ethnographic work often includes a small-scale in-depth case study on a single setting or a group of people (Atkinson and Hammersley, 2007). As Flyvberg (2006) argues, the case study is important to researchers because it allows

closeness to real life situations and provides multiple wealth of detail. I chose as particular case studies, a specialist vet and a GP vet for in-depth exploration, the focus being their routine actions and rituals – some might say 'performances' (Goffman, 1972) – to understand their typical patterns of work, typical problems and typical solutions and so on. The case studies proved to be essential for the formation and development of the conceptual and theoretical aspects of the research. Even though I interviewed more government vets, I did not choose them as case studies because the specialist and generalist vets were more interesting, were interested in the research, I had developed a relationship with them and they were able to articulate expertise beyond technical and medical knowledges. As mentioned earlier, the government vets wanted briefing on questions and were less willing to talk in-depth of their current official role but some were more forthcoming about past experiences and these extracts from interviews have been used in the analysis chapters (Chapters 7 and 8). Both case studies are very experienced practitioners with very different views on the veterinary profession which makes them interesting. This is not a comparative study of a specialist and generalist vet rather they are interesting examples. However, my case studies are of intrinsic interest and generalization is not the prime concern (Atkinson and Hammersley, 2007)

Doubts about the representativeness of the findings and generalizability is one of the most cited critiques of ethnographic work based on a small number of case studies (Atkinson and Hammersley, 2007). Recently, the case study approach has warranted re-examination within the social sciences and traditional critiques (usually from natural science proponents within social science) such as – 'case studies are not valuable because they are nothing more than anecdotes' – and – 'generalisations cannot be made from case studies' have been challenged and arguments for the place of case studies made (see Flyvberg, 2006). With both case studies I conducted serial interviews, telephone and email conversations, work shadowing and observation to develop a deeper understanding of their work. However, to reiterate, claims are not being made here about the generalisability of the case studies presented in the thesis.

Participant observation

Participant observation alongside interviews and discussions provided the data for the case studies. An interesting point to note is that when I first met one of my case studies (the generalist vet at one of the Vets and Veterinary Services Working Group) he was rather confrontational and defensive. He assumed that because I was from the Centre for Rural Economy I was an economist and that my study was going to assess the economic value of rural vets. He said, "So you're an economist then? What are going to do see how much vets cost the economy and replace us with technicians?" I found this remark to be of interest in that he was concerned with the potential threat of para-professionals to veterinarians. This was to become a common theme with him and many other vets I spoke to. However, despite this somewhat confrontational first meeting his attitude softened once I had explained that my role was simply as a sociologist wanting to gain first hand insight into the life and work of vets. My second case study Archie Murdoch has been involved with the research since I commenced my MSc. He has been a constant support and help throughout. Archie Murdoch is a specialist vet and he was most willing to be involved from the very beginning and has expressed interest in future work.

In my fieldwork the participant observation was in the form of work shadowing and notes were made afterwards in a field diary. I was aware when shadowing the two case studies that behaviour and attitudes may not be constant across settings and that I may influence the context (Atkinson and Hammersley, 2007). Therefore, work shadowing was complimented by interviews, less formal discussions, telephone conversations and email correspondence over the year of fieldwork. This ensured that interpretations of observations were tested for their validity and alternatives could be checked before being included in the final analysis.

The two core case studies are formulated on different lines to make the most of each (see Chapters 5 and 6). Chapter 5 is about 'the working day in the life of a rural vet' and is the generalist example. Although this case study is presented as a 'day on the life' based upon one of the days I spent shadowing and observing it is not based on a one day

performance because there has been lots of contact with this person before and after the day presented in this thesis. This vet was chosen because he is a high profile figure in the profession and he is interesting. This particular day spent shadowing was chosen because it was the day that moved my thoughts along and it became the case because it seemed most relevant. Chapter 6 is the specialist case study and is formulated as a 'biography of a specialist' and this biography has been built up over a series of interviews, observation, and telephone and email conversations and is my construction of his biography. This approach follows biographical research that focuses on biographical identity and structuring whereby the development of the individual is analysed in the life course (see Fischer-Rosenthal, 2000). Again I chose this person because he is one of only five specialists in his field and as it became apparent is somewhat unusual and interesting because he strongly asserts his specialist identity.

Assembling and analysing the empirical data

The interviews (see Table 2.1) were recorded on a Sony digital recorder and I made observations in a number of field diaries. I transcribed the interviews soon after the actual interviews and analysed them and the field notes manually to elicit themes and categorise the data. In doing this I was able to check their validity by cross-referencing between interview transcripts and field notes and if any aspect was unclear, difficult to interpret or conflicted with other interviewees' responses I was able to either conduct another interview or telephone or email questions. In total I conducted 27 interviews with vets and by this time I reached saturation i.e. similar or the same views were being expressed and/or observed repeatedly.

Not all interviews were included in the thesis and this is for two reasons: first, as mentioned above, some of the government vets were giving 'stock' answers and rigid protocols regarding pre-defined questions were necessary before the interview took place. This severely limited the usefulness of the data generated and second, some vets found it difficult to articulate and understand expertise beyond technical and medical

competencies despite numerous ways of questioning. The data included in the thesis is from interviews and/or participant observation with vets who were able to understand and articulate their expertise beyond technical and medical knowledges. Furthermore, participant observation was essential so I could watch and experience how vets express their expertise beyond technical and medical knowledges. By watching them, I noticed how they spoke of broader issues, how they interacted with the client and animals, how they performed expertise in mundane ways (locally and at a distance) and solved problems and/or dealt with the unusual or unexpected which stretched their capacities.

The categories identified were central to the analysis of 'veterinary expertise' - how it emerges, develops and is performed in different settings and contexts. Theoretical ideas and common-sense expectations played a key role and allowed me to pick out surprising, interesting and important features for analysis (Atkinson and Hammersley, 2007). This process of sifting and comparison led to the development of the thesis chapters. The empirical chapters include examples of routine exchanges of expertise to provide illumination of mundane performances and also failed performances and unexpected outcomes (Atkinson and Hammersley (2007).

Ethical considerations

There were no particular ethical issues raised during the research except those common to most projects such as consent, responsibility to research participants, anonymity and confidentiality and this research had been conducted in line with the British Sociological Association Statement of Ethical Practice (2002). For each interview I explained the research and what their contribution would be used for. I gained consent to record the interviews and use the data generated in the thesis and explained before anything was used they could view and alter the transcripts if they wished. None of the interviewees took up this opportunity but the two case study vets often read and commented on the material written about them. To ensure anonymity real names have not been used in the thesis and pseudonyms have been given.

Conclusion

This chapter has discussed the methodological approach, research techniques and their strengths and limitations within the context of researching vets (and some non-vets) working in the farm/large animal sector in the UK. The pre-defined methodology of the ESRC/CASE studentship provided the focus for the research and the ethnographic techniques suggested were only subject to slight modifications as the research unfolded. The most notable change was development of an auto-ethnographic approach to understand the 'self' in the thesis and the self in relation to others. Auto-ethnography suited me as a writer because it allows for evocative prose which can stimulate an emotional response for the reader. The critiques of auto-ethnography are discussed and its inclusion in the thesis is justified because it is only one approach amongst other ethnographic techniques. The chapter has also identified the problems faced when interviewing 'elites' in government who gave prescriptive responses and could not conceptualise expertise beyond technical and medical knowledge's and competencies. Participant observation therefore, was an essential part of the research in order for me to observe the mundane working practices and exchanges of expertise and these aspects were explored in depth in the two case studies of a specialist and generalist vet. These two case studies were chosen because they were the ones who I had developed the closest relationship with; they were intrinsically interesting and were interested in being involved in the research therefore, an in-depth study of them provided the opportunity to see them interact in different settings. Furthermore, they most closely matched the direction of the conceptual research in terms of specialisation, generalisation, authority and expertise.

No claims about the generalisability of the case studies are being made as this was not of primary concern (Atkinson and Hammersley, 2007). The analysis and interpretation of the data was informed by existing theories of expertise (discussed in the next chapter) as well as helping to understand the limitations of existing theories.

Chapter 3

Professional expertise and authority

3.1 Introduction

This chapter seeks to explore current notions of expertise and the expert in relation to veterinary medicine and its practitioners. It will draw from academic literature on expertise in general and focus on the medical and veterinary professions in particular. It will look beyond the idea that medical and veterinary expertise are restricted to medical and technical knowledges and competency. Instead, it will critically examine notions of expertise such as experience, power, authority and legitimacy and socially constructed notions of expertise and discuss them in relation to human and veterinary medicine within the differing spheres of practice. This chapter also aims to understand how veterinarians construct, develop and maintain their professional authority by examining Weber's (1958) notions of authority such as rational and legal and how they apply (or not) to vets. It also introduces the notion of Aesculapian authority (see Chapter 7 for the development of the Aesculapian authority concept based on empirical work). Aesculapian authority is said to be the most powerful authority that one can posses. It was originally applied only to doctors and its historical roots can be traced to ancient Greece and Rome. It is claimed by philosophers to be an essential authority that doctors have simply for being healers. The philosopher Bernard Rollin has developed a concept of this authority as it applies to vets: he too claims it to be natural authority. My main argument is that expertise cannot be compartmentalised and that there is no singular definition of veterinary expertise. Rather, the conceptualisations of veterinary expertise are relational and are integrated and complementary according to the different roles practitioners play and how they are perceived by society and policy makers.

3.2 Understanding expertise

Experts present themselves to the wider public as a uniquely qualified and skilled elite whose depth and breadth of knowledge, technical competency and in many cases possession of specific qualifications allows them to claim status superior to that of the 'lay' individual. However, as the plethora of expertise and experts have grown in fields as diverse as medical science, and atomic power the public and policy makers have increasingly faced the problem of whose expertise to accept or discard. In consequence, the concept of expertise and the expert has received considerable attention from academics within the social sciences. As such, there is now a rich and diverse pool of literature devoted to notions of expertise. With perhaps the exception of Collins and Evans (2002) who attempt to offer a normative definition of expertise and the expert, the apparent consensus amongst most social scientists is that expertise and the expert cannot be compartmentalised within a particular skill, activity or person. Instead, the challenge is to conceptualise different forms of expertise as integrated and complementary rather than compartmentalised (Dunn et al, 2008).

The terms 'expertise' and 'expert' are well established in everyday vocabulary. Frequently, as individuals, we make life choices that are influenced or determined by others' expertise or expert status. Yet how do we decide on whose expertise to trust and whose to discard? How do we decide just who is an expert? How do we understand expertise? Expertise is not, a fixed definitive concept but is a fluid subjective notion that is determined and contested by different people at different times for different reasons. For example, expertise can be viewed as experience, thus our parents and grandparents are often considered to have expertise in childcare and child rearing despite not having medical or nursing qualifications. In consequence, many children are placed in the temporary care of grandparents or the grandparent's opinion is sought and acted upon. Clearly then trust and familiarity are the denominators here and it is trust that underpins the understanding and validation of expertise at least in some elements of childcare. Trust then can be seen as integral to our understanding of expertise but how do we trust the expert? I will argue that expertise and the expert are different concepts and whilst it is

comparatively easy to trust a persons or organisations expertise at a local familiar level trusting the remote expert is more difficult and trust becomes harder to acquire the more remote the expert is. In addition, the advice of those with expertise and that of the expert may differ and that provides us with sometimes-difficult moral and ethical challenges. For example, whilst we may trust our grandparent's expertise in childcare we may regard the midwife or health visitor as the expert. Moreover, the health visitor may strongly disagree on certain aspects of childcare, thus we are faced with whose advice to accept. Obviously, at this level of decision making one may assume that the expert's opinion will be accepted because as individuals we can discriminate between expertise as experience and expertise as formalised knowledge, accredited competency and importantly legitimacy. Thus, we trust the health visitor because we accept and value the legitimacy of his or her professional status and credentials. In other words, we socially confer expertise on certain individuals or organisations with different degrees of trust and credibility.

Somewhat harder to determine though, is how we trust and confer expertise on individuals, organisations and concepts that are not familiar and local but are remote and unfamiliar. For example how do we trust that the food we buy is safe to eat? Well partly through our own 'lay expertise' in that over time we gain experience and knowledge that rotten meat is bad for us and we can recognise such meat. But also we now accept and validate the expertise of remote food 'experts' working in industry or government who determine what is good for us and what is bad. Thus, we trust these experts and their expertise although they are not known to us because fundamentally we trust the state to regulate and enforce on our behalf certain standards of food quality and safety that has been evidence based scientifically. Therefore, trust and expertise can be seen as being referred. Harder though is who do we trust and whose expertise do we validate when it comes to something that has yet to be quantified and determined? For example, in the contentious issue of genetically modified (GM) foods whom do we trust? And whose judgement do we accept or discard? This is not only a problem for the individual but also for government and policy makers who are charged and trusted by society to ensure safe, dependable and sustainable food for our consumption.

In this first section, I will be exploring and critically analysing the current notions of expertise and the expert ranging from expertise as experience, expertise as power, authority and legitimacy, and the concepts of socially conferred expertise and value-added expertise. In short, I intend to advance the argument on how we know what we know about expertise and the expert. In the second section, with relevance to the veterinary profession I will explore how medical / veterinary expertise is performed and how medical / veterinary 'experts' act. Finally, I will conclude that notions and concepts of expertise are elusive and at times problematic.

3.2.1 Practical experience, knowledge and the professional expert

Practical experience may be considered a component of expertise. Yet experience understood as a skill, activity or ability needs to be perceived as being something that is acquired over time yet is sufficiently difficult that not everyone can achieve it. Further expertise as practical experience is required to have some welfare benefit for others. This may suggest that the acquisition of special knowledge is important to experience. Further, practical experience could be considered to be knowledge, in that it is achieved by repeated trial and encounter and it need not be theoretical for it to be recognised and validated by others. For example, the tacit knowledge generated by parents and grandparents in childcare. Amin and Cohendet (2004) argue that there is an assumption that practical knowledge can be separated from intellectual knowledge as each type is thought to have distinctive attributes and capabilities. Therefore, the knowledge of the carpenter is thought to be of an applied nature gained by practical experience and physical mastery. The knowledge of the scientist however, is considered to be of an intellectual nature gained by education and rooted in the powers of reason, logic and cognition. In today's society, knowledge has become increasingly important and several scholars have commented on the shift towards a 'knowledge based economy' (for example, Abramowitz and Malcolm, 1996). Therefore, traditional views of 'knowledge' as just information have been challenged and a new typology of knowledge has been developed. For example, Nonaka and Takeuchi (1995) suggest that we should consider

all the four basic types of knowledge (codified/individual; codified/collective; tacit/individual; tacit/collective) as epistemologically different and as of equal importance. Adapting Spender's 'knowledge matrix', Amin and Cohendet (2004) suggest a 'typology of knowledge' as shown in Table 3.1.

Table 3.1: A typology of knowledge (adapted from Spender, 1997 by Amin and Cohendet, 2004:34)

	Individual	**Social (or) collective**
Explicit (or codified)	Conscious (Spender, 1997) Embrained (Blackler, 2002)) Know-what (Lundvall and Johnson,1994)	Objectified (Spender, 1997) Encoded (Blackler, 2002)) Know-why (Lundvall and Johnson,1994)
Tacit	Automatic (Spender, 1997)) Embodied (Blackler, 2002) Know-how (Lundvall and Johnson, 1994)	Collective (Spender, 1997) Embedded/encultured (Blackler, 2002) Know-who (Lundvall and Johnson, 1994)

Amin and Cohendet (2004:34-35) then go on to describe the different 'typologies of knowledge' from Table 3.1 as follows:

Conscious knowledge is constituted by the formal knowledge and such knowledge they argue is held by professionals who know the ways to perform and use formal methods and are certified in doing so. To Blackler (2002) this type of knowledge is referred to as 'embrained knowledge', which is constituted by conceptual skills and cognitive abilities. Whereas, to Lundvall and Johnson (1994) 'conscious knowledge' corresponds to the 'know-what' (referring to knowledge about facts). *Objectified knowledge* (arithmetic, logic, physics laws, and so on) is explicit, codifiable, transmittable without bias through

language and generic. It refers to knowledge that constantly evolves through the pursuit of science, and that serves as a platform to investigate new empirical phenomena. To Blackler (2002) this type of knowledge is referred to as 'encoded knowledge'. Whereas, to Lundvall and Johnson (1994) 'objectified knowledge' corresponds to the 'know-why' (referring to scientific knowledge of principles and laws of motion in nature, in the human mind and in society). *Automatic knowledge* is the personal, tacit and non-conscious knowledge that allows the individual to understand and develop explicit knowledge. This refers to the tacit form of knowledge described by Michael Polanyi (see Polanyi, 1958, 1967). Tacit knowledge by its nature is not codifiable and so cannot be learned in the same way as other forms. Blackler (2002) refers to this type of knowledge as 'embodied knowledge', whereas, for Lundvall and Johnson (1994) 'automatic knowledge' corresponds to 'know-how'. *Collective knowledge* (routines, rules of conduct, and so on) is tacitly shared knowledge that guides individual as well as collective action. This form of knowledge is created by convention through the collective use in language and action. To Blackler (2002) 'collective knowledge' can be distinguished at two levels – 'embedded knowledge', which resides in systemic routines, and 'encultured knowledge', which results from the process of acquiring shared understanding. However, there is no clear match at this level with the Lundvall and Johnson typology, since their conception of 'know-how' essentially refers to individuals (see automatic knowledge). But Amin and Cohendet (2004) argue that a sub-category of 'know-who' could be incorporated, referring to specific and selective social relations.

So, are these typologies useful when thinking about veterinary knowledge and expertise? Of these typologies, conscious, automatic and collective knowledges are most relevant for the understanding of medical and veterinary expertise. Although medical and veterinary practitioners may claim to have objectified knowledge, this could be disputed. Such practitioners may come from science but the practice of their professions is as much an art. Whether medical and veterinary practitioners could be considered scientists then is debatable. Both physicians and vets are trained in scientific methods and in the course of their practice use scientific techniques such as observation and evidence gathering and analysis, yet much of their day-to-day performance is essentially unscientific. For

example, their relationship with patients and clients is often subjective, both kinds of practitioner may do what they, and their clients think best for that individual. Physicians and vets acknowledge the difference between disease and illness. Disease is scientific; it is objective and can be measured, quantified, diagnosed and predicted. Illness on the other hand is unscientific as it is a subjective and individual experience. The caring practitioner understands this and will develop a plan of care tailored to the needs of the individual that may be ameliorative rather than curative. For example, the GP will treat the patients' illness not necessarily their disease. An example here is lung disease due to smoking where the GP might provide treatment for the symptoms such as dysopnea without demanding that the patient stops smoking which is a means of avoiding the disease.

Expertise then is more than simply being able to do 'something,' however well. For example over the years, I have gained a lot of experience in walking my dogs: could this then be considered to expertise? I would think not, as although experience may certainly be necessary for expertise, the end activity i.e. dog walking could be performed by anyone. Some tasks or activities then do not require expertise and importantly do not offer the chance of developing it because they are not sufficiently complex or have any utility value to others. So expertise then is considered to be a capability for an activity, function that not everyone can perform – i.e. a skill. Moreover, that experience does not always translate into expertise.

The following is from Evans and Collins (2002:251-253) who succinctly comment on experience and expertise,

> "Experience, however, cannot be the defining criterion of expertise. It may be necessary to have experience in order to have experience-based expertise, but it is not sufficient. One might, for example, have huge experience of lying in bed in the morning, but this does not make one an expert at it (except in an amusing ironic sense). Why not? Because it is taken for granted that anyone could master it immediately without practice, so nothing in the way of 'skill' has been gained

> through the experience. More difficult, one might have huge experience at drawing up astrological charts, but one would not want to say that this gives one the kind of expertise that enables one to contribute to technical decision-making in the public domain. Why not? Here, unlike lying in bed, an esoteric skill has been mastered which could not be mimicked by just anyone – at least not to the extent that it could pass among skilled practitioners of astrological charts. Astrology is, rather, disqualified by its content".

Making a similar point, Germain, (2006) argues that expertise can be acquired by prolonged or intense experience through practice in a particular field and it is not necessary for an individual to have a formal qualification for their expertise to be accepted. For example, a stockman with twenty years experience of cattle rearing could be considered to have expertise in the complete management and care of cattle. He does not require a veterinary degree to be able to rear his stock; his expertise is expressed and judged on how well he manages his animals. Germain (2006) argues that this socially constructed expertise is the emergent property of communities of practice[3].

The veterinarian is also deemed to have expertise through professional knowledge, acquired through formal and specific training that excludes the others. The veterinarian can of course acquire expertise through experience but importantly what defines the veterinarian is his professional status. The professional expresses his expertise through a complex hierarchy and network of education, peer recognition, legal and social constructions. Does this however, confer expert status? The next sub-section discusses the 'professional expert' in more detail.

[3] The concept of communities of practice has been advanced by Lave and Wenger (1991) to identify groups of people who are informally bound together by shared expertise and interests and are involved in the same field of practice. Further, communities of practice may be thought of as a means improving the individual's competencies by being orientated to the needs of its members where the goal is to learn and develop common skills through the construction and exchange of common resources.

3.2.2 The 'professional expert'

Within different disciplines and professions (for example: medicine, education and sociology) there is a range of literature on 'professionalism' and different authors agree that the concept is ambiguous (Dent and Whitehead, 2002; Boshuizen, et al., 2004; van der Camp et al., 2004). Also, there is often interchangeable use between the terms 'professionalism', 'the professional person' and the 'professional expert' (Mancini, 1999; Fischer, 2005) and they are used in a largely undefined and taken-for-granted manner (Mancini, 1999; Lowe et al., 2001; Fischer, 2005). However, there have been a number of interpretations that illustrate how 'professionalism' and the 'professional expert' is a "multi-layered construction" (Derkzen and Bock, 2007:192).

For example, to Fischer (2005:20) a 'professional expert' is someone who has a 'body of knowledge' and 'relevant techniques'. Wilson (2006) provides an example of a professional expert - an agricultural economist who works in the agriculture sector, a project manager; who is an expatriate, salaried employee of national government; and who has worked in several locations. Leach et al (2005: 4) again emphasise the knowledge typology, stating that a professional expert is someone who combines theoretical knowledge and experiential (tacit) knowledge that is derived from professional practice. In general, this combination will enable him to construct a normative model of practice that might even have consolidated among similar professionals over time into a manual of institutionalised 'best practice', although part of this model will always remain personal. There will also be recognition to varying degrees that the model will require adaptation to different circumstances, underpinned by a complementary acknowledgement that each location of practice will be different in terms of social relations, politics and culture; and that outside of one's professional field; lay people especially will have different experiences, and different ontologies. Evetts (2003) suggests that professional experts are interlinked and mutually dependent upon the rational-legal social order (of Weber, 1958). That is the capitalist economy and that the authority of the professions and the bureaucratic organisations rested on the same

principles such as functional specificity, restriction of the power domain and the application of universalistic, impersonal standards.

These different interpretations of the 'professional expert' illustrate the ambiguity stated previously. The 'multi-layered' aspects of interpretation seem to revolve around mixing the idea of the 'individual' *professional expert* and the 'group' of *professionals* who then express '*professionalism and expertise*'. There is a specific process of 'becoming a professional'. First, specific knowledge or expertise is acquired through formal training at a recognised institution that focuses on the subject, for example, veterinary medicine. Socialisation then takes place within the culture of the profession and this 'enculturation' into a group enables the professional to become accepted and legitimised in a certain context (Boshuizen et al, 2004:6). As Derzen and Bock (2007:192) argue,

> "the enculturation of the professional into a group touches on the question of how people become identified as part of a common profession or 'collectivity', and how this professional identity is defined and defended".

Gonzalez and Benito (2001:346-347) have developed a minimum model to identify the 'enculturation of the professional into a group' based on three factors. First, through the existence of specialised technical knowledge. Second, through the capacity for self-organisation and getting its voice heard and third, through the closure mechanisms which control access to the profession. Clearly, the UK veterinary profession shares these 'enculturing' factors. They have developed specialised technical knowledges, are self organised and regulated via the BVA and RCVS and importantly due the Veterinary Surgeons Act are a closed and 'protected' profession.

3.2.3 Linking 'expert' and 'lay' knowledge

Knowledge is not solely situated in the dominion of experts, for example, the vet and in recent years, the production and politics of knowledge have gained considerable attention (Riley, 2008). It is now widely accepted that the production of knowledge in society is

not dichotomous, with elite-based knowledge in the scientific domain and lay knowledge in society (Amin and Cohendet, 2004). Instead as Nowotny et al (2001:246-7) argue,

> "as expertise becomes socially distributed in an economy marked by the proliferation of knowledge across the social and institutional spectrum, synthesis and authority depend on the ability to bring together knowledge which is distributed, contextualized and heterogeneous, rather than through expertise located at one specific site or through the views of one scientific discipline or group of highly respected researchers".

Veterinary expertise then, or more specifically expertise on animals cannot just be viewed through vets as the 'lay' knowledge of farmers, technicians etc is equally valuable. For instance, in rural research arenas, it has been argued that 'lay' knowledge has been under-represented and/or ignored and this includes the farmer-scientist interface (Riley, 2008). This is because since the post-war period, the 'scientific' modernization of agriculture has been given a privileged role within agriculture and agricultural policy and vets have been central to this. In developing countries, democratic approaches to land use and environmental management have been noted, that seek to give legitimacy to farmers' more experiential knowledge and understandings (Burgess et al, 2000; Kothari, 2002). A study by Riley (2008) explores farmer-expert knowledge and environmentally friendly practices and draws on empirical material from the Peak District, UK. Riley (2008:1291) concludes that,

> "rather than offering a simple addition to scientific expertise and understandings, farmers' knowledges offer a different form of understanding that is often tacit, experience led, and embodied. These embodied and lived understandings of farmers, embedded in the narratives of the social history of their farms and in the actual performance of their practices, provide insights that are often beyond the reach of techniques and records of elite science.

In contrast to Collins and Evans (2002) who argue that farmers lack the 'interactional expertise' to communicate with scientific experts; a view which reinforces the linear one-way hierarchy of knowledges and expertise flowing from elite scientist *to* farmers: Riley (2008:1292) suggests that farmers have intricate and detailed knowledges and expertise built up over time in their cultures and lifeworlds. This suggests there is a two-way dimension to expertise and knowledge exchange (rather than transfer) and this is especially relevant when considering the farmer-vet working relationship as the farm vet may share the same context-specific social history. Further, it could be argued that the exchange of knowledge and expertise is more than a one or two way process that suggests it is 'on rails' but rather a fluid process that seeps and finds nooks and crannies. Speaking about relationships between research and practice, Phillipson and Liddon (2007) have identified four models of knowledge transfer and exchange – linear, feedback, collaborative and joint production (Table 3.2).

Table 3.2: Knowledge exchange models
(adapted from Phillipson and Liddon, 2007:6)

Model	Description
Linear	Based on the assumption that knowledge users passively receive knowledge. The knowledge is packaged into technical products or training
Feedback	Involves a dialogue between knowledge producers and users and allows the latter to give feedback and so influence subsequent research. They only give feedback on outcomes, not the process of knowledge production itself.
Collaborative	Puts knowledge producers and users side by side and enables them to talk to each other throughout the research process, from problem framing, through discussion of methods to dissemination of research outcomes
Joint Production	Dissolves the boundary between knowledge producers and users. Multiple forms of expertise, among academics, practitioners, businesses, land managers and the public are considered valuable and contribute to knowledge production. There is an emphasis on how academic and non-academic knowledge can be mutually enriching. Underlies the need to move away from one-way 'knowledge transfer' to two-way 'knowledge exchange'

The ‘joint production model’ offered by Phillipson and Liddon (2007) of multiple forms of expertise that dissolves the boundaries of ‘one and two way exchanges’ is especially useful in developing an understanding of expertise. Farmers, vets and indeed the public have differentiated knowledges and these can be seen as ‘alternatives’ that are drawn upon in certain situations and circumstances – there are other knowledges out there. In recent times, the advent of the internet has increased the scope and dimension of knowledge acquisition and expertise amongst ‘non-experts’ and indeed professional experts and contributes to the mobility and fluidity of knowledge exchange(s) and thus contributes to spatial understandings of expertise as dynamic and fluid (see Section 3.2.5 on ‘distant expertise’). There is also a temporal dimension to understandings of knowledge and expertise whereby ‘old’ knowledges and expertise are re-examined, reinterpreted and/or re-used, an example being the recent re-use of old medical interventions such as leeches and maggots after ‘new’ scientific re-interpretations.

3.2.4 Socially conferred expertise

So far, this chapter has stated that expertise is contentious and subject to opinion. Thus within the wider public different actors interpret the notion of expertise in different ways and by different criteria. The moment we think about the meaning of expertise and who possesses it we make value judgements based partly on our previous and existing knowledge, familiarity with the subject, person, and trust and of the opinions of the wider society. In addition, however, we make value judgements on the degree of skill, knowledge and competency of an activity that we consider to be expertise. Fundamental to the notion of expertise is trust, this is particularly so when we consider expertise as being socially conferred.

Humans are dependent upon diverse knowledges to function in contemporary society. And as such, we regularly defer to and trust in ‘experts’ to advise and guide us. Yet as knowledge expands and becomes more specialised paradoxically, we have become more dependent and supportive of experts, yet less sure about what expertise is and in what ways it is beneficial or detrimental. This poses problems as to whose expertise we trust

and whose we discard (Briggle, 2008). Trust is a complex, multidimensional and problematic concept and it encapsulates notions of goodwill, fairness, perceived competence, reliability and responsibility (Bennett, 1999). As Walls et al (2004) propose, it may be conceptualised as a continuum in which 'critical trust' lies between the extremes of unquestioning acceptance and outright distrust. Within these extremes are what Walls et al (2004) describes as interrelated 'target elements' such as trust of information, individuals and institutions. Thus, the trustworthiness of information may be dependent on the level of trust placed on individuals and institutions and their source of information. For example, whilst public trust in the expertise of doctors is high, trust in government scientists is consistently low (Brown, 1989; House of Lords, 2000). How then do we make judgements of expertise? As infants and children, we are so highly dependent upon our parents and other adults to make decisions for us that we have no choice but to trust them without question. This is in part due to the child's undeveloped powers of reasoning and cognisance. Also, it is heavily influenced by familiarity and perhaps our innate sense that our parents will do us no harm. Thus, the notion of goodwill is as important as perceived competence in conceptualising socially conferred expertise. However, as we grow and develop we begin to discriminate and we learn other mechanisms to help us decide whom we trust or not. Goodwill remains highly important but becomes tempered by experience and new knowledges. Thus, although we may have no doubt as to the good intent of our parents in caring for us when we are ill, we will value the doctors medical expertise to a greater extent. Moreover, exposure to other, sometimes contradictory messages to our established attitudes and beliefs may influence the degree of trustworthiness we award to individuals, groups or organisations. Negative experiences and adverse incidents with some individuals or groups can alter or even damage trustworthiness (Frewer, 1999). This is particularly so when it is perceived that certain events are mismanaged either by individuals or by organisations. An example here is the BSE crisis of the 1980s and 1990s, whereby according to Brown et al (2000), the government lost public confidence and trust due to poorly informed and badly managed public health and agricultural strategies. Loss of trust inevitably leads to loss of credibility.

Trust then is an integral component of socially conferred expertise. Whom we trust and importantly how we learn whom or what to distrust is crucial. Trust is acquired initially through familiarity of either the individual or group. It is developed through notions of good will, reliability, fairness and perceived competency. Trustworthiness is also dependent upon the views of others within society of whom we trust. For example, through familiarity, we trust our general practitioner to refer us to a credible and trustworthy specialist. This I term as *trust by proxy* and this contributes to an understanding of 'distant expertise' (Section 3.2.5). Trust by proxy is an essential characteristic of socially conferred expertise if we accept that the essence of this type of expertise is acknowledged through the notions good intent.

3.2.5 Distant expertise

Section 3.2.3 began the argument that there are spatial and temporal dimensions to understandings of expertise in relation to knowledges. Section 3.2.4 makes the distinction between trust, trustworthiness and goodwill and the importance of familiarity as integral components of socially conferred expertise. Furthermore, it was argued that trust by proxy is a way of understanding situations where expertise is drawn from a 'distance'. This may mean individual person-to-person referrals for example, when a vet or human doctor refers to a specialist or it may mean judgements of the trustworthiness of an organisation based on their principles, values and performance e.g. some people may trust the Royal Society for the Protection of Animals (RSPCA) because of their high profile reputation based on good intent.

Thus there are differentiated understandings of distant expertise. Formal expertise can act over a vast territory and still build up a personal relationship. To conceptualise distant expertise the theory of knowledge conversion (Nonaka, 1994) is useful. The theory of knowledge conversion, commonly applied in organizational and institutional situations (see for example, Will and Levitt, 2008) assumes that knowledge is created, converted and flows through a spiral-like process involving four steps:

• *Socialisation*: the transfer of tacit knowledge through shared experiences such as mentoring and on-the-job training

• *Combination*: the transfer of explicit knowledge through mechanisms such as meetings, information processing and technology

• *Externalisation*: the conversion and transfer of tacit knowledge to explicit knowledge through questioning and reconstruction of perspectives and decisions

• *Internalisation*: the conversion and transfer of explicit knowledge to tacit knowledge through learning and the awareness of knowledge (Will and Levitt, 2008:7)

Drawing from this work, two strategies have been identified to manage this knowledge - codification and personalisation (Hansen et al, 1999). Codification is linked to combination and revolves heavily around the use of information technology tools and practices to connect people to reusable, explicit knowledge. Personalisation relies on socialisation techniques to link people so they can share tacit knowledge.

Codification and personalisation are relevant for understanding the ways in which formal expertise networks work within the veterinary profession in terms of referrals to distant experts and/or specialists. Formal expertise networks can develop over time and space without face-to-face contact through the medium of telecommunications and the internet. These technological networks are increasingly becoming one of the main ways of sharing and disseminating knowledge and communicating 'at a distance' (e.g. email). The recent Survey of the Profession (RCVS, 2010:76) identified of those vets who responded and have access to the internet, 94 per cent use email regularly compared to 82 per cent of the respondents in the 2006 survey" (see Chapter7, Section 7.5 for more on the way the case study performs expertise at a distance through multi-media exchanges).

Beyond the flows of expertise and knowledge within and between the veterinary profession there can also be multiple network interactions especially when considering the relationship between formal and informal expertise networks (i.e. networks outside the veterinary profession that have interactions with it such as farmers, the public and so on). Formal expertise networks can be challenged by informal expertise networks

because of free and open access to knowledge, goods etc via the internet. For example, farmers can buy cheaper pharmaceuticals on the internet rather than purchasing directly from their local vet. This leads to a consideration of what value does the vet bring in relation to expertise. Why, when for example, the farmer can purchase cheaper pharmaceuticals online should they go to the vet?

3.2.6 Value-added expertise

Section 3.2.5 ended by asking the question – why go to the vet? What value to they add? In answering the questions, this section introduces the novel concept of 'value added expertise' and argues that it is of cogent relevance to veterinary expertise. It draws from existing theories of value adding in economics and the social sciences. The main argument is that veterinary expertise is more than technical competency and medical knowledge. Vets bring with them an extra 'something' that improves upon their intrinsic medical skill and adds value to the service they provide to the client / patient. This in turn adds value to their basic knowledges and abilities.

The term value added derives from neo-classical economic theory; it describes the contribution of factors of production such as land, labour and capital in raising the value of a product, and is expressed as the raised income received by the owners of the factors of production. For example, the manufacture of chocolate increases the value of cocoa beans to those who own the chocolate factories. In the social sciences, value added theory draws from Smelser's (1962) work on social movements. Smelser argued that social movements evolve due to certain 'value added' stages of social change. However, when conceptualising the 'value added' dimension of expertise, it becomes more abstract and generalised. All forms of economy i.e. the economy of knowledge, expertise, ability, and so on are dependent upon the continuous flows of production, exchange and consumption. The value generated by the products of these flows is determined by the relations and material practices of the public who determine what becomes regarded as being useful, helpful, improving and beneficial (Hudson, 2006). Expertise could then be classed as a commodity that needs to be capitalised before it can be exchanged and

consumed. It could also be said that expertise rather like the cocoa bean can experience a value added transformation. Equally important, is the notion of value and how society values the commodity of expertise.

All vets leave university with 'day one competencies' – they have the basic skills to be able to perform as a vet. However, they have yet to gain experience and this is gathered over time and is where the value added dimension of expertise is developed, for example, experienced rural vets can gain an understanding of the farm economy and society. They can develop an understanding of agricultural policies and their impact on the farmer and the health and welfare of farm animals. In addition vets like the GP gain a deep understanding of the wider community and where the farmer and his animals sit in relation to other farms and farmers and the rural economy. The rural vet has a position in that he understands and has a relationship with the individual and the collective within the community, which he serves. This social aspect of human and veterinary medicine cannot be understood by bio-technical techniques and thus requires the vet to acquire and develop socio-cultural expertise in order for them to practice from above a basic patho-physiological model.

Lowe (2009) recognises the value added dimension of expertise and argues that,

> "Veterinarians are challenged to build value to the private sector needs which enables their clients to meet both commercial imperatives and statutory requirements" (Lowe, 2009:50)

Furthermore, Lowe (2009:50) argues,

> "there is a need to clearly understand and articulate customer requirements for veterinary services and to effectively market value added veterinary services to both the private and public sector".

Therefore, there is a compelling argument that veterinarians need to recognise and market the value added dimension of their expertise and the true value of veterinary expertise lies in the ability to capitalise the basic commodity and transform it into a saleable consumable product.

3.3 Expertise as power, authority and legitimacy

Moving beyond the notion of the local and familiar, and developing an understanding of expertise where authority does not or cannot rely on implicit trust this section draws on the notion of Aesculapian Authority (Armstrong, 2009; Paterson, 1957; Rollin, 2006; Siegler and Osmond, 1974;) and Weber's three types of authority (1958). In introducing these two concepts of authority, it is suggested that both are important when considering veterinary expertise and authority. Aesculapian authority, which according to Paterson (1957), derives from a combination of sapiential, moral and charismatic authority is useful as it helps explain the uniqueness of 'healers' more as individuals rather than a profession (see Chapter 7 for more on the conceptual development and limitations of Aesculapian authority in relation to the veterinary performance) whereas, Weber's notion of 'three types of legitimate rule' (traditional, charismatic, and legal-rational authority) is useful to understand the authority of the profession or group.

Throughout history, society has conferred a special status on physicians (Johnson, 2003). The question arises why do patients listen to their doctors and believe and do what they say? This could also be asked of the clients of veterinarians. To answer these questions the most relevant theory is Aesculapian authority. The term Aesculapian authority was first coined in 1957 by the sociologist T.T.Paterson as a means of understanding the relationships between the authority and power held by physicians and how their patients accepted them. The definition of 'authority' that applies here is power derived from opinion, respect, or esteem; a claim to be believed or obeyed (Johnson, 2003). According to Siegler and Osmond (1974), Aesculapian authority is by far the most powerful authority in society – it is a uniquely powerful authority vested in those society perceive as healers, so kings, politicians and dictators submit to medical authority. Aesculapian

authority is historically traceable to the time when medicine was inseparable from magic and religion. Aesculapian authority allows the 'sick' to escape from the responsibilities of life but in return they must surrender their independence and autonomy in effect they must transfer the ownership of their bodily and temporal functions be it temporarily to the physician. According to Paterson (1957), Aesculapian authority derives from a combination of sapiential, moral and charismatic authority. *Sapiential authority* is the special wisdom and knowledge, thus, sapiential refers to the power physicians have because of their knowledge. *Moral authority* requires that physicians operate from a position of integrity, not only in their practice but in their personal life as well. Moral authority derives from the principle that physicians are expected to act on behalf of the needs and best interests of their patients. They act as leaders to their patients, providing guidance not just mere advice. Physicians are expected to take responsibility for their patients' medical wellbeing by taking temporary (sometimes-longer) ownership of their patients health needs. *Charismatic authority*, in the original meaning, meant the charismatic trait that derives from the historical confluence between medicine and religion: between physicians and priests. The etymology of charisma is varied, The Greek describes at a divine gift. The German describes it as the gift of leadership and power of authority and this is how Weber interpreted it. The modern basis of charismatic authority has little to do with religion but rather with the realities of life and death. Physicians and medical science are not omnipotent nor are they omnicompetant, and yet the patient must relate to the physician with faith, and the belief that the physician can help and effect a 'cure'. Further, the physician's charismatic trait can encourage many patients to seek advice on other aspects of their life not just their health. Veterinarians share Aesculapian authority with physicians yet there are some distinct differences (see section below in traditional authority). Max Weber defines *charismatic authority* as that which is found in a leader whose mission and vision inspire others. It is based upon the *perceived* extraordinary characteristics of an individual. The veterinarian's charismatic trait is more like a combination of the two notions whereby, charismatic authority (AA version) is useful for understanding the uniquely powerful position of healers in society based on their history and tradition and Weber's version helps to understand not only the personal charisma - the traits - of individual vets (some may have this, some may not) but also I

argue, the institutional leadership of the profession, whose role it is to inspire vets with their mission and vision – this could mean the RCVS. Charismatic authority evolves within the boundaries of traditional and legal-rational authority so is often 'routinized' i.e. controlled by the traditional and/or legal-rational authority. Weber's model and Aesculapian authority are more than ideal types they are dynamic and therefore, help to understand the fluidity of veterinary expertise and authority and the ways in which within different situations or contexts some aspects of authority may be stronger or weaker and each relate and influence the other(s). As Weber (1964) states institutions and organizations can have mixture of these authorities and each can serve to legitimize the organization to different audiences at different times and as DeLanda (2006) argues within different spaces.

The public rarely questions the physicians "Aesculapian authority" and thus physicians are allowed and encouraged to become the primary source for cultural views on health, illness and disease at least in the Western tradition. However, the physicians' authority is not completely omnipotent as is witnessed by the growth of alternative medicine that challenges as reductionist the philosophy of the traditional physician. Alternative medicine argues that health is a state of balance and "wellness" and that terms such as illness, ill health, disease etc are semantic inventions of traditional physicians to shore up their authority.

According to Rollin (2006) veterinary medicine has actually outdone human medicine in its emphasis on mechanistic and reductionist approaches to animal health and disease. In human medicine even the most obtuse physician realises that there is a cultural and therefore valuational dimension to health and illness. After all he must gain the confidence of his patients to maintain his social authority so he develops the "bedside manner." The veterinarian on the other hand need not consider the influence of social and cultural aspects on the health of his patients (although he may have to do so with his clients). They (animals) do not display social/ human pathologies, such as smoking, nor do they present with illogical and annoying complaints of a hypochondriatic or psychosomatic nature; so the veterinarian can focus his attention on the scientific, rational and objective pursuit of medicine. Thus, some veterinarians have been accused of

seeing animals as simply unthinking biological machines that function in a predetermined way and that veterinarians merely attempt to repair 'broken' animals. However, veterinarians must, if they wish to make a living, adopt a "bedside manner" to their clients. They must convince their clients that they are a caring professional, sensitive to animal suffering and orientated towards the welfare of the animal.

It is tempting to think of physicians and veterinarians as being of the same ilk – both are "doctors" and it is only their patients that differ. Although there are many similarities between the two professions these are superficial. The fundamental difference that separates human and veterinary understandings and meanings of health (in humans and animals) is their differentiated Aesculapian authority. It is argued below that for physicians, their Aesculpian authority is derived from the arts, humanities and cultural practices as well as 'cold' science therefore, the physician draws heavily on *tradition*. The Aesculapian authority of the physician has emerged and evolved from a long and ancient history, whereas the veterinary profession is much younger. To understand the role of traditional authority in the veterinary profession one has to look beyond Aesculapian Authority to Max Weber's notion of traditional authority. According to the sociologist Max Weber '*Traditional authority*' is legitimated by the sanctity of tradition whereby the ability and right to rule is passed down, often through heredity. It does not change overtime, does not facilitate social change, tends to be irrational and inconsistent, and perpetuates the status quo.

Physicians as a professional group predate veterinarians by hundreds if not thousands of years and it is from this long history that they can justify their traditional authority. Their history and philosophy has its origins in the arts, humanities, astrology and divinity, only much later did science in the modern sense become important to physicians and human medicine. Medicine before science was highly organised and exclusive. Early physicians enjoyed great prestige and status, and according to French (2003) they were an elite in terms of reputation and rewards. Further, French (2003) argues that whereas modern scholars can form little idea of the clinical effectiveness of the ancient physicians, yet they where highly successful. Thus, it would appear that their expertise was judged on other criteria. It is interesting to note that in many respects early physicians practiced in

much the same way as modern alternative practitioners with the emphasis being on "balance" and "wellness". Much of their explanatory power relied and relies on natural philosophy supported by shrewd observation skills, practical competency, self-confidence and the ability to *construct* the expectations of their patients and then fulfill them.

Medicine however, has evolved and from the middle ages to the enlightenment it experienced challenges to its credibility and authority. French (2003) and Porter (2000) have described these challenges as being "crisis's of theory" where the power of natural philosophy collapsed and was replaced by science. Much of this was due to early medicines inability to deal with outbreaks of disease in particular the "French Disease" (syphilis). In 1494, French troops besieging Naples were struck down by a then 'new' disease. It manifested as abscesses throughout the body coupled with great pain (Arrizabalaga, et al 1997). Worse still it spread throughout the population of Naples. Physicians argued between themselves as to its cause and its treatment. Many were convinced that it was due to astrological alignments and thus beyond the power of human intervention. Others believed it was due to an abduction from the "good life" and thus pray and purging was required. Neither group understood or accepted contagion theory. There was no mention to this disease in any of their books written by the ancients of Greece and Rome. The city leaders in desperation decided to quarantine those affected and turned to the chemists and alchemists for advice. Where the doctors had failed, the chemists had some success with the use of metals such as mercury and aguaiacum wood. The physicians were shaken that unschooled 'emprics' could provide the answers where they, the learned men of Hippocraties and Galen, could not. This is of cogent interest today that as it demonstrates that there is precedence of "lay" claims to expertise that can challenge professional expertise and authority.

Syphilis was just one of many diseases that challenged the authority and expertise of the physicians as the sole experts in health and disease. Other less learned men demonstrated equal if not greater competency in the understanding and management of health,illness and disease. However, the physicians authority remained virtually intact by their ability to grudgingly accept that perhaps the ancient writers were not as omnipotent as believed. And for the physicians to maintain their status they would need to claim for their own the

new methods of enquiry and experiment. They were as we now recognise very succesful in this respect. Physicians managed to lay claim to mechanistic reductionist science as the basis of modern medicine and yet they still derive their Aesculapian authority from an ancient past rooted in the arts and theology. An interesting point to illustrate this is that, up until 2004, UK medical graduates still swore the original Hippocratic oath with its references to Apollo and Aesclepius. Physicians then have evolved from learned practitioners of the arts whose original source of reference was the library, astronomy / astrology and theology . They later embraced "modern"science as the means to inform their social function whilst never completely severing the umbilicus of their orgins.

As a professional group veterinarians are comparatively new in terms of UK medical history. In the UK, veterinary medicine as a distinct discipline is an invention of the late Enlightenment. Obviously there is a long history of animal healers but as an independent and professional body veterinarians are new on the scene. They do not share the history nor the anicient philosophy of the physicians. The roots of veterinary medicine are established in the zeitgiest of the late eighteenth century. The scientific revolution was at its height during the late 1700s, ushering in a series of changes in the structure of European thought with systematic doubt, empirical and sensory verification, the abstraction of human knowledge into separate sciences, and the view that the world functions like a machine(French, 2003). The early English veterinarians such as William Moorcroft, a Lancashire farmer's son who originally trained as a surgeon under John Hunter were keen to bring to agriculture and animal husbandry the new methods of scientific enquiry. An outbreak of cattle disease persuaded Moorcroft that existing animal treatments by cow leeches and, in some cases, human doctors were ineffective and steeped in folk lore and superstition. He traveled to France were he trained as vet at Lyon University under St Bell. On his return to England, he established a lucrative practice as an equine veterinarian in London. Later in 1794 he became briefly the first joint president of the London Veterinary College along with the surgeon Edward Coleman. I do not intend to discuss the origins of the UK veterinary profession here other than stating that the embryonic veterinary profession did not – could not – share the same history and philosophy with the medical profession, and thus it sought to gain traditional and

Aesculapian authority in other ways. In its infancy, the veterinary profession embraced the ideas of the scientific revolution, particularly the idea that the world and therefore animals function like a machine. In doing so, the early veterinarians distanced themselves from their "unenlightened" competitors in animal healing such as the farriers and cow leeches accusing them of being ignorant and brutal (Pugh, 1962). Further, they were ridiculed for their age old beliefs and practices that had more in common with superstition and mysticism than 'modern' medicine. The intention was that the new veterinary medicine should be the preserve of scientifically educated men and its authority over animal health and treatment. The gradual monopoly (which had to be fought over and is still contested) that veterinarians gained plus their ready acceptance of natural science as the sole informant of veterinary knowledge has influenced how notions of animal health, illness and disease are now perceived and understood.

The vets professional body and regulator, the Royal College of Veterinary Surgeons (RCVS), was established in 1844 by Royal Charter (Royal Charters date back to the thirteenth century and are granted by the reigning monarch to create public or private corporations and to define their rights, privileges and purpose). Under the terms of the charter, veterinary medicine was formally recognised as a profession and a single coordinating and regulatory body created with the dual aims of enhancing the profession's status and controlling standards within veterinary education and practice. The RCVS in its dual role as regulator and professional body attempts to lay claim to traditional authority by the invention of tradition and aping the medical profession in its control over its members. It has invented the appearance of a history and tradition that it does not really have, with the display of totems and ornaments. For example, they have a very flamboyant coat of arms (Figure 3.1) depicting a horses head, a horse shoe, the staff of Aescapulis and what appears to be a sheep surmounted by Chiron (The Greek Centaur associated with healing) stood on a Knights helmet. They have a Latin motto *Vis Unita Fortior* which I interpret to mean United Strength is Stronger.

Figure 3.1: RCVS Coat of Arms

Clearly, the RCVS is attempting to symbolically create an ancient tradition and history with the use of Chiron and the staff of Aescapulis suggesting that they have been around since ancient Greece. The Latin motto adds to this non-history. The horse and horse shoe however, suggests that they admit their lowly origins from farriery. The staff of Aescapulis is borrowed from medicine so they are telling us that they are physicians. The horse appears to be of great significance to the power and authority of the RCVS. The president of the RCVS sits on what is in effect a throne. It is an ornately carved chair with horses heads carved from the arm rests. It looks faintly ridiculous.

Vets may argue that they have a historical tradition in the treatment and management of animals but their argument is weak because compared to human medicine (and the law) they are a modern profession. Therefore, when faced with challenges to their traditional authority – for example, alternative 'experts' working in the animal field (e.g. equine technicians and animal scientists) they have to turn to their legal authority because their traditional authority is weak. In particular, they use the Royal Charter and the Veterinary Surgeons Act (VSA) 1966 to legitimate their authority over animals' health. However, the VSA which currently requires the RCVS to exclude all but RCVS registered veterinarians from performing a range of veterinary medical practices is currently under review by government. This may lead to the legal recognition of competent persons other than veterinarians to supply hither to exclusive veterinary services. It is also interesting to note that the new act is to be called the Veterinary Services Act and the term surgeon is absent. Does this suggest that government recognises the expertise of alternative experts

in the provision of animal health services? It certainly further weakens the vets position and monopoly.

Concluding remarks

This chapter has demonstrated that expertise cannot be compartmentalised or easily defined. Nor can it be associated with a particular skill, activity or person. Rather, expertise is a fluid and at times problematic notion that shifts spatially and temporally and between different people and activities. Further, it has suggested that society discriminates between different levels and types of expertise and makes value judgements based on a variety of criteria. These include trust, familiarity, informal and formal acquired expertise, complexity and value to society. In addition, society chooses different levels and types of expertise to suit different situations and in doing so accepts the notion of 'lay' expertise. However, expertise is more than a relationship of localised trust and familiarity and professional expertise can operate at a distance as part of formal and informal networks. Further, the chapter introduced a new dimension to the concept of expertise that is 'value added' expertise.

To understand expertise in relation to power, authority and legitimacy the chapter introduced the notion of Aesculapian authority - a unique authority possessed by 'healers' by nature of their special and superior knowledge, moral integrity and their charisma. This is useful to understand the individual's veterinary expertise and authority. To understand the professions authority the chapter argues that Weber's notion of three types of legitimate rule is most helpful – especially legal and traditional authority. Legal authority is of special importance to vets because of challenges to their authority and expertise from para-professionals and forms of 'distant expertise' as discussed above. Furthermore, vets are a modern profession when compared to human medicine therefore; they have invented a historical tradition and have aped medicine. The relative modernity of the veterinary profession weakens their argument if it is based on tradition therefore they fall back on their legal authority – the Royal charter and the Veterinary Surgeons Act 1966 - but under the new Coalition government of 2010, the VSA is being re-examined and amended and this situation makes for a sense of a contested territory.

Chapter 4

Specialisation and the professions

"One of the more surprising things I have learned about the veterinary profession is the way that veterinary specialisation is defined and recognised. Despite several attempts to have the profession's approach explained to me, I struggled to make sense of it" (Lowe, 2009:56)

4. 1 Introduction

Professions organise, regulate and validate certain, societally important experts. They determine what are the fundamental skills and knowledge and appropriate conduct to be a lawyer, doctor, dentist or vet. Professions also provide the basis for internal specialisation, while often retaining the notions or the role of the professional that can comprehend the breadth of problems and fields over which the profession claims authority. Thus, there is the opposition of expert / lay in the profession / public divide. In addition, internally within the profession there is the generalist / specialist distinction. These are not unrelated processes: both are central to the ways in which professions maintain their status and authority, externally and internally.

The focus on the veterinary profession arises out of a concern that it faces an uncertain future. Many of the ways of characterising some of the contemporary ills or dilemmas of the profession touch on the issue of the state of veterinary specialisation, as cause or a possible solution. For example, the profession is routinely characterised as on a trajectory from focusing on farm animals to focusing on companion animals, via an intermediary position, referred to as 'mixed practice'. This transition is requiring considerable shifts in the skills, expertise and practice, as well as in the public image and social and commercial context of veterinary work. In considering to what extent notions of veterinary specialisation are central to contemporary debates about the future of the profession, one is inevitably led to make comparisons with other neighbouring professions, with whom vets themselves (and others) draw comparison. At the same time, the regulation of professional competence is of public concern across the established professions.

What is specialisation?

Specialisation is defined in different ways in different contexts thus, a universal definition remains elusive. For example, specialisation can be conceived as the honing of a particular skill through experience and practice into a specific circumscribed role. An alternative view is that specialisation is the accumulation of detailed knowledge focused into an ever-decreasing field; in other words to know more and more about less and less. Specialisation is also the division of labour achieved by the separation of certain tasks from a production process to improve efficiency whether this is in the manufacture of pins or medical practice. Specialisation is the mark of the specialist so what then characterises a specialist?

What is a specialist?

Feltovich et al (1997:46) argue that the specialist is one who has undergone a great amount of training and experience in a limited domain of activity and has acquired an extensive but deep knowledge base specifically tailored for that activity. Linked to specialisation is expertise and Ericsson (2006) states that the modern conception of expertise seems to favour the specialist and specialised skills, honed over many years of extensive training and deliberate practice. Although it is recognised that a generalist may possess many of the skills of the specialist such as sound reasoning, subject knowledge and critical thinking, Feltovich et al (1997) argue that the notion of the expert generalist is difficult to capture within current notions of expertise and specialisation. The generalist differs from the specialist in that, as specialisation is the division of labour and thus specialists perform narrow tasks to a greater depth and presumably greater efficiency, generalists perform a wider variety of tasks and functions but to less depth and less efficiency. In medicine, medical specialism can be defined as "the limitation of practice or study to a particular field or branch of medicine, dentistry, or other health profession. It is philosophically distinct from the generalist theory in which familiarity with a wide cross section of the particular discipline is advocated" (Weisz, 2003).

This aim of this chapter is to introduce and discuss professional specialisation in order to gain an understanding of veterinary specialisation. The chapter begins with a discussion of specialist and niche areas in veterinary medicine and argues that veterinary specialisation has been and continues to be species, socially and economically dependent. Since the creation of the UK veterinary profession in the late eighteenth century vets have practiced in niche areas which could be considered to be specialist but were not formally recognised as such. The chapter then moves on to a comparison of four professions of similar status (Law, Dentistry, Medicine and Veterinary Medicine) to highlight similarities and differences in university/postgraduate training, specialism routes and structures, working practices, regulation, professional bodies, ranks and referral procedures. This comparison highlights the uniqueness of the veterinary profession in terms of specialisation. One might expect that the veterinary profession would have specialist routes like other professions – but it does not. This chapter reveals that the veterinary profession is more complicated in terms of specialist and generalist dynamics because of their legal duty to treat *all species* of animals. The comparison with human medicine is particularly relevant because there are similarities and differences in their histories (Gardiner, 2010) and vets themselves often make the comparison in contemporary discussions. Yet as this chapter highlights, unlike their human counterparts veterinarians do not specialise in areas of disease or systems (e.g. oncology, renal, cardiac etc) rather they specialise in a species and maintain general skills in all systems of that particular species. Finally, the chapter discusses formal routes into specialisation in the veterinary profession and compares the RCVS recognised specialists and the BVA specialist divisions.

4.2 Specialist and niche areas in veterinary medicine

Within the professions, specialisation serves as a means of separating and promoting certain tasks and functions from within the professional group. In so doing, this separation not only distinguishes the generalist from the specialist but also creates distinctions between specialists such as ophthalmologists and oncologists or criminal or

commercial lawyers. In medicine, for example, the specialist as opposed to the generalist focuses his / her expertise into specific and sometimes complex functions such as cardiac surgery or oncology that are not included within the normal scope of practice of the generalist. The implication is this enables previously unattainable goals to be achieved. Further, in human medicine, specialists are defined by their expertise in a particular body system, disease or group of diseases and by procedures or interventions they may carry out in relation to these diseases or systems. The emphasis is therefore on the disease or system rather than the individual as a whole (Piterman and Koritsas, 2005: 432). This is called 'clinical specialisation'. Vets on the other hand have the opportunity to specialise as 'whole animal' specialists for example; pig medicine and/or 'clinical specialisation', such as dermatology, which can be applied to a range of species. However, veterinary specialisation is relatively new and underdeveloped at least from the perspective of the RCVS as it was not until 1991 that a specialist register was created. This begs the question: were there vet specialists before this time?

Historically, UK vets have practiced as general practitioners (GPs) and do not have a tradition of specialisation. Unlike medicine whose practitioners originally operated as separate and competing factions, ie physcians, surgeons and apothocaries, vets have since their establishment as a recognised profession operated as an homogenous group or at least they have appeared to do so. As Gardiner (2010) argues, veterinary medicine is concerned with all creatures great and small and veterinary patients are a diverse group. In consequence, the division in veterinary medicine is along *species* lines (Gardiner, 2010:31). Vets are expected to treat all species of animal and therefore 'generalist' skills are required. As Gardiner (2010:30) argues, in their early history, the profession was one of general practitioners who performed surgery. However, another reading of the development of the profession is that vets were specialists but on species or niche lines rather than the 'disease or system' specialist divisions seen in human medicine. For example, a vet could be considered an equine specialist but would not be seen as an equine renal or cardiac specialist. Furthermore, if one continues this reading of veterinary history one can see that specialism in the profession was dictated by whichever species was economically and/or socially important at the time. This section highlights the

species or niche areas in the history and development of the veterinary profession. In some ways it is presented as a chronology but there was not a wholesale movement of veterinary practice into these areas – many have remained and evolved over time – their importance shifting according to social and/or economic factors. The chronology of specialist areas or niches is complex. For example, the horse was dominant in the early days of the profession and equine specialism persists today but the horse and other species or niche specialisms have dominated or declined in importance over time and in different spaces.

Since the creation of the UK veterinary profession in the late eighteenth century vets have practiced in niche areas which could be considered to be specialist. In the late eighteenth century the Odiham Agricultural Society for example, wanted a specialist person skilled and knowledgeable in the diseases of farm animals. They wanted to gain better understandings and knowledges of livestock husbandry and production: in short they were looking for a Jethro Tull of the animal aspect of agriculture (see Pugh, 1962). In addition to this, some members of the society wanted to see an improvement in the welfare of **all** animals, and called for "the humane treatment of sick animals".

The original hopes and intentions for the new veterinary profession who would attend to both the understanding of farm animal productivity and the health needs of all animals wished by the members of Odiham did not materialise, at least not initially. Despite the establishment of the London Veterinary College (LVC) with its comprehensive syllabus (see Pugh, 1962 for a detailed account of the first veterinary medicine syllabus), the farm animal and indeed every other animal was excluded in favour of the horse. Until mechanisation, the horse of course was the most important animal in terms of transport, pleasure, gambling, and agriculture and, of course, warfare. In Britain, the inadequate treatment and care of the army's horses due to poor farriery became a great concern and questions were raised in parliament. It was said that more horses died due to poor farriery than to disease or warfare (Pugh, 1962). The first vets trained and practised exclusively on the horse due to the needs of the army. However, civilian vets made comfortable livings from equine medicine and they adopted the manners and dress of the human GP doctor (Patterson, 1984). So in one respect vets had specialised, at least in terms of

species, yet they retained their generalist skills in being able to treat all aspects of equine systems (and any other animal if asked). The crucial professional need was to distinguish them and their superiority from farriers and farriery.

Even in agricultural areas the vet's role was seen as the "horse doctor" other animals would be attended to by the stock keeper or leech. This persisted well into the mid twentieth century. So we can see two important contemporary themes emerging here, that vets have conformed and reacted to the wants and demands of society rather then proactively constructing the expectations of society by marketing the added value of veterinary services (see Lowe, 2009:50 for more on improving customer orientation) and that there is a long tradition of alternative veterinary expertise and competition.

Zoonotic diseases have become a major ground for interprofessional rivalry and contestation. Speaking of rabies in Britain in the nineteenth century, Pemberton and Warboys (2007:197) comment upon competition between various 'experts',

> "Amongst Englishmen and Englishwomen at home there were five main groups of 'experts' on rabies: veterinarians, doctors, the public, animal welfare reformers, and state officials, both functionaries and politicians. We might expect veterinarians to have been the most authoritative group given that rabies was primarily an animal disease. However, sustained professional practice with dogs did not develop until the second half of the twentieth century and before then 'dog doctor' was a term of abuse".

The veterinary profession's inability to promote a consistent contagionist view of rabies undermined their expertise and weakened the authority of the profession (Pemberton and Warboys, 2007) and made it difficult for them to promote themselves as specialists. This changed in the 1890s when a consistent contagionist view of rabies was promoted by veterinarians, politicians and state officials (Pemberton and Warboys, 2007). The vets' authority and expertise as specialists understanding contagion was dependent upon powerful alliances with government.

Understanding that some animal diseases like rabies and glanders could be transmitted to humans provided vets with their next specialist or niche area – public health. However, it was not until the end of the century that significant attention was paid to the connections between animal and human diseases (Hardy, 2002; Fisher, 1998). At first, sanitation and public health reformers and local authorities concentrated their efforts in the supply of clean water, refuse collection and disposal and the surveillance of adulterated foodstuffs. Initial concerns remained a medical matter and health departments did not consider the veterinarian to assist them with animal issues or problems (Hardy, 2002). It was the Army that provides a professional route to advancement for the veterinarian and public health. The Army had adopted a 'hygienic' approach to equine health and drew heavily from continental veterinary practices (Smith, 1887). In 1875 a military veterinarian George Fleming published "A Manual of Veterinary Sanitary Science and Police". This dealt with not only epizootic diseases but also their prevention and suppression and not only in the horse but food animals too. He advocated the idea of a "veterinary police" or a locally based veterinary sanitation organisation charged with responsibility for the veterinary inspection of meat and milk supplies and the condition of slaughterhouses. He expressed the 'intimate connections between public hygiene and with veterinary sanitary science (Hardy, 2002). Despite the example of pioneering veterinarians and enlightened cities such as Manchester, Birmingham and Edinburgh that advanced a new model of public health by incorporating veterinarians and doctors as a public health team, the take up around the country was slow and fragmented and the situation persisted until the eve of the Second World War (MAFF, 1965).

The Second World War provided UK veterinarians with obstacles and opportunities in respect to their involvement in public health and wellbeing. It also provided veterinarians with a specialist niche - that of experts in farm livestock productivity and yield especially milk production. In 1940 the National Veterinary Medical Association (NVMA) established a committee (known as the 'survey committee') to discuss how veterinarians could be best used in a wartime role within the agricultural sector. This led to vets being a reserved occupation, exempted from military service. The 'survey committee' gathered evidence on the incidence and impact of cattle diseases on dairy herd health, fertility and

milk yields and current methods of combating them. Using sources and organisations such as Cambridge University's Institute of Animal Pathology and the Agricultural Research Council, it combined expertise from both animal breeders and pathologists and importantly it gained the support of the National Farmers Union (NFU). The formation of links between stakeholders within and without the veterinary profession was crucial to the veterinarians' argument to both farmers and the state that they had special knowledges and expertise in dealing with livestock disease and importantly with fertility and productivity (Survey Committee, 1940). The veterinarians convinced farming leaders and the state of the importance of their expertise in reproductive science and milk yield productivity, and it was expected that most veterinarians would take up posts under the survey scheme. However, in 1943 with the war extended to the Middle and Far East, many veterinarians were diverted into military service. Unlike the war in Europe, war in Asia relied much more on animals for transport rather than machines. Horses, mules, donkeys, bullocks even elephants were used extensively (RAVC, 2009). These animals needed veterinarians to maintain their health and efficiency. As a result veterinarians were de-reservered and for the remainder of the war Veterinary schools and practices were scoured by the Army for men of fighting age (Bullock, 1943). Thus the survey scheme failed to be fully prosecuted at least for the duration of the war. However, what the scheme did achieve was to convince the Ministry of Agriculture and Food (MAF) and farmers of the value and indeed the necessity of veterinarians in agriculture and the superiority of veterinary science over home 'doctoring' (Mackintosh, 1941-2; Hammond and Hunter-Smith, 1942-3).

The involvement of the state via MAF in agriculture whereby agriculture was effectively nationalised during the Second World War, plus the veterinarians campaign for jobs and credibility during the war's early phase had significant impacts on post war farming and veterinary practices. Farmers were more ready to accept the veterinarian on the farm because in part they could afford the fees and because veterinarians demonstrated their value and expertise with positive effect. 'Farming from Whitehall' also established closer links between the state, the farm and the veterinarian and encouraged a sense of patriotic duty in farmers to seek veterinary advice to improve productivity ((Mackintosh, 1941-2;

Hammond and Hunter-Smith, 1942-3). Farmers were encouraged to view veterinarians as valuable collaborators and partners in farming practice and to see their skills as more than doctoring sick animals (Woods, 2007).

The 1947 Agricultural Act cemented war time policies such as fixed prices and a guaranteed market in return for 'good' farming practice (Martin, 2000) Veterinary expertise in the specialist area of food animals was considered an essential element in post war food production. In 1948 the Veterinary Surgeons Act outlawed unqualified veterinary practitioners (although it allowed for a 'grandfather' clause for existing non-qualified practitioners to register with the Royal College of Veterinary Surgeons [RCVS]). The veterinary colleges received increased state funding to both increase the numbers of veterinarians and to develop and improve veterinary research and in 1949 two new veterinary schools were established at Bristol University and at Cambridge University. Field stations were set up around the country all providing employment for qualified veterinarians (Great Britain Parliament, 1948). However, it is interesting to note that, although the relationship between vets and agriculture was strengthened during this time, the six UK veterinary schools (London, Edinburgh, Glasgow, Cambridge, Bristol, Liverpool) were geographically and institutionally distant from the agricultural colleges. Instead they were associated with Universities with established medical and dental schools thus aligning veterinarians with medics rather than agriculturists. This is unlike, say, the US where vet schools were mainly set up in the landgrant colleges, established in the late nineteenth century in each state initially for the training of local farmers, thus embedding veterinary teaching and research alongside agronomy, in agricultural areas.

During the post-war years in the UK and the 'productivist' period of agriculture the relationship with government was one of "acting as patriarch for the profession – setting policy, making regulation, directing and paying for task-based rather than professionally based services" (Lowe, 2009:72). As Lowe (2009:72) continues, "the relationship between government and the veterinary profession is complex and longstanding". Well into the 1960s food animal work dominated and accounted for the large majority of private practice income in all regions of the UK (Veterinary Record, 1966 cited in Lowe,

2009:20). Large/food animal work was the specialist area during this time although small animal work existed and gradually expanded initially through mixed practices and then as dedicated small/companion animal practices (Gardiner, 2010). Indeed, James Herriot (Alf Wight) who practiced in Thirsk, North Yorkshire from 1939 to the 1980s reveals how small animal medicine was at first seen as an inferior add-on to rural veterinary practice. Usually cats and dogs etc would be seen at the end of the day when the farm work was over. This was in response to locals' expectations that the vet was the best person to attend to the health needs of their pets. Herriot explains in several of his books how even though this aspect was not the mainstay of practice it was necessary to offer this service out of goodwill and to maintain his professional standing. Further he mentions competition from other vets and indeed from lay competitors who made claims to be experts on dogs and one of whom at least was by all accounts a thorn in the flesh for Herriot and his partner.

The decline in large animal practitioners continued and concerns were expressed in the House of Commons Environment, Food and Rural Affairs Committee (EFRACom) Report (2003) and the Royal College of Veterinary Surgeons (RCVS) working group on rural veterinary practice (2006). As Lowe (2009:20) suggests, "over the years there has been a steady growth in the number of veterinarians working with companion animals at the expense of other fields of activity…….[there has been] a sharp decline in food animal work apparent in the late 1990s and movement towards small animals…..Nowadays the large majority of veterinarians work in practices that do no farm/food animal work". These concerns are primarily directed at the UK government's initiative to improve the quality, safety and welfare of farm animals intended for the food chain (DEFRA, 2003; RCVS 2006). In addition, reports have collated the findings of working groups on veterinarians and veterinary services (Organisation Consulting Partnership, 2004); explored the choices made by graduate veterinarians early in their careers with emphasis on the farm animal sector (Institute of Employment Studies, 2004) and have investigated the underlying factors determining the supply and retention of farm animal veterinarians (Westley Consulting 2004).These reports question the veterinarian's future ability to maintain farm animal health, welfare and biosecurity. Evidence suggests that with the

decline in UK agriculture there has been a corresponding decline in farm animal veterinary practice and a shift to mixed animal practice, which favors small animals. In consequence, where veterinary specialisation occurs there is a tendency for it to be in the small animal (pet) sector. However, this is differentiated, in some UK farming districts there is a concentration of certain species such as pigs (e.g. East Yorkshire) or poultry (e.g. East Anglia) and this may encourage vets in these locations to specialise in these species or be employed directly by corporate concerns. In other regions, rural vets appear to be diversifying by offering a range of 'specialist' services under a generalist umbrella. It could be argued that by simply honing ones skill into a specified area of practice such as dairy farming or pig production constitutes specialisation and thus there is a long tradition of vet specialisation even if the RCVS did not officially recognise it. Perhaps it is more important to the individual vet that his / her clients and peers recognise him as a specialist. However, many vets consider themselves to be general practitioners; what then is the notion of a vet generalist? A vet generalist is a vet who claims to have the competency to deal with a broad range of species and their pathologies. A vet generalist claims to be able to treat anything from renal disease in a cat to milk fever in a cow. However, vets would agree that, although they share a common training and nominal understanding of a variety of species medicine that equips them to manage routine or straightforward procedures in most animals - such as caesarian sections in dogs or cows - it is when other problems present such as a fractured jaw in a cat or low fertility in a cattle herd that specialised skill, experience and knowledge are required.

4.3 A Comparison of Professional Specialisation

The following table and discussion aims to compare doctors, dentists, lawyers and vets as a way of providing a critical view of veterinary specialisation. As Lowe (2009:56) argues, speaking about veterinary specialisation,

> "not only is the organisation of veterinary specialisation confusing and opaque, but the profession's concept of specialisation is inward-looking and orientated towards fellow professionals rather than aimed at informing the customer".

Continuing, he argues therefore, "it is perhaps unsurprising that formal veterinary specialisation is so weakly developed, certainly in comparison with professions such as human medicine and dentistry" (Lowe, 2009:57). The professions of law, dentistry and medicine were chosen as comparisons because they are all older professions with whom vets consciously compare themselves. This section demonstrates explicitly the uniqueness of veterinary specialisation when compared to other professions. Much greater attention is paid to medicine rather than law and dentistry because medicine is vet's most frequently used comparator (not always appropriately). Furthermore, on occasions in the thesis I use medicine as a yardstick to point out similarities and differences therefore I have gone into greater depth on medicine.

Table 4.1: Comparison of Professional Specialisation

	Doctors		**Dentists**	**Lawyers**		**Vets**
University training	5-6 yrs (4 yrs for graduate entry)		5-6 yrs	3 yrs (LLB degree in law but NOT qualified to be a lawyer. Must choose pathway – bar or solicitor		5-6 yrs
Postgraduate training	Provisional registration with GMC on graduation but requires one year of postgraduate training for full registration. Specific training for speciality. Time varies from 3 yrs GP to 7+ in medicine and surgery		Registered with GDC after graduation. CPD 35 hrs/yr for GDP. Hospital service	<u>Bar</u> BPTC (1yr) then Pupilage (1yr). CPD 45 hrs/yr plus 9 hrs of advocacy training	<u>Solicitor</u> LPC (1yr) then training contract (2 yrs) plus professional skills course (PSC). CPD now mandatory for Solicitors Regulation Authority annual fitness to practice certificate	No pre registration year required. Registered after university training. New vets have to complete 1 yr of postgraduate education known as the Professional Development Phase (PDP) to achieve 'year one competencies' thereafter must complete 35 hrs/yr CPD
Specialism routes	<u>Hospital Doctor</u> Structured specialism route. Foundation training 2yrs. Specific training as laid down by MMCP. Mentoring by supervisor. Then applies for specialist training: <u>Surgery</u> (sub specialism e.g. cardiothoracic) <u>Medicine</u> (sub specialism e.g. cardiology)	<u>GP</u> Structured route following foundation training. Specific training as laid down by RCGP. Mentoring by qualified GP trainer.	<u>GDP</u> Semi-structured route. Mentoring by GDC approved vocational trainer (1yr). Assistant in private practice, tend to remain generalists eventually buys partnership. <u>Hospital service</u> structured similar to doctors e.g.	Structured routes. Mentoring by pupil supervisor. Specialist areas include: Criminal Law; Financial Law; Employment Law; Family Law etc	Structured routes. Mentoring by qualified trainer. Assistant in private practice eventually buys partnership. NB although there has been an increase in specialist legal firms e.g. medical negligence, public defence etc many general practices have	Unstructured. Mentoring by senior vet. Assistant in general practice. Eventually buys partnership NB in larger practices may concentrate on one aspect of practice e.g. small or large animals. May join charities, government service, industry, education. or army

			orthodontics NB to specialise in maxilo-facial surgery now requires a medical degree.		specialist lawyers within the firm	
Working practices	Hospital doctors – salaried employees but work within a 'firm'	GPs – self employed or partnership	In private practice - self employed or partnership. Salaried in Hospital service	Self employed not allowed to form partnerships but work in 'Chambers'	Self employed or partnership	Self-employed or partnership. However many vets are salaried employees in industry, government service, charities or army
Regulator	GMC	GMC	GDC	Bar Standards Board	Solicitors Regulation Authority	RCVS
Professional regulator	Depends on specialism e.g. Royal College of Physicians, Royal College of Surgeons, Royal College of Anaesthetists etc	Royal College of General Practitioners	No Royal College of dental surgeons but fellowships in dentistry awarded by Royal College of Surgeons	Bar Council	Law Society	RCVS
Ranks	House Officer Senior House Officer Registrar Senior or Specialist Registrar Consultant	GP Registrar GP Partner Principle	Assistant Associate Partner In hospital follows same ranks as doctors	Pupil Junior Barrister Senior Barrister (Silk – QC) Head of Chambers Judiciary	Trainee Assistant Partner Senior Partner	Assistant Partner Senior partner in general practice. In govt service can rise to Chief Veterinary Officer.
Referral	System of referral may cross-refer to other specialists e.g. Physician to Surgeon	System of referral obligatory if beyond scope of practice and competency but may cross refer to other GP in practice	System of referral to specialist obligatory if beyond scope of practice and competency	May refer to other barrister in chambers for opinion	Referral to Barrister obligatory when beyond scope of practice and competency	Referral to specialist not obligatory. May cross refer to other vet in practice

Lawyers

Law graduates are not lawyers they simply hold a degree in laws. To practice as either a barrister or solicitor in England and Wales they must complete a structured postgraduate training course approved by either the Bar Standards Board or the Law Society.

Barristers

Graduates wishing to become barristers must gain a place in an approved centre such as the College of Law and complete a one year Bar professional training course(BPTC) [This has superseded the Bar Vocational Course] Initially they must register with one of the four Inns of Court as a trainee. The Bar is highly competitive and expensive as there is no state funding available (although there are a limited number of bursaries). Also there are more barristers trained than there are jobs for. On completion of the BVC, their Inn will call the graduate to the Bar. During the BPTC year and before Call can take place graduates must undertake 12 qualifying sessions (previously known as "dining") with their Inn. Then they must apply for and secure a position as a pupil within approved training chambers. Traditionally this was unpaid but in recent years a small salary has been offered. Pupilage is divided into two six monthly blocks in which the pupil gains practical training under the supervision of an experienced barrister. The first block is non-practising during which pupils shadow, and work with, their approved pupil supervisor before entering the second block which is practising. Here pupils, with their pupil supervisor's permission, can pratise and supply legal services and exercise rights of audience within the courts. In the first three years' of practice, newly qualified barristers are required to complete 45 hours of CPD, including at least 9 hours of advocacy training and 3 hours of ethics. After the first three years of practice they are required to undertake 12 hours of CPD each year.

Solicitors

A prospective solicitor must complete the Legal Practice Course (LPC) at an approved centre. Although slightly less competetive than the BPTC it is expensive and costs around

£8,000. This course lasts one academic year and provides the graduate a comprehensive training in laws and procedures. Upon completion the graduate must apply for and gain a solicitors training contract with a Law Society approved training establishment. A training contract is a salaried post and takes two years to complete. In addition trainees must complete the Professional Skills Course (PSC). After this trainees can apply to be included on the professional roll held by the law society and are free to practise and supply legal services. However, all solicitors in England and Wales must devote sixteen hours per year to compulsory professional development, failure to do so can lead to the withdrawal or refusal of the Solictors Regulation Authorities fitness to practise certificate required for solicitors.

Although barristers are sometimes refered to as specialists and solicitors as general practitioners akin to medicine this is not strictly true. Indeed barristers may specialise in specific and narrow aspects of law such as company law, but most practise in broader areas including criminal, family, and civil law. The essential difference between the two groups is their right of audience. The barrister has the right of audience before the higher courts and thus will advocate for more serious / complex cases. The solicitor is indeed something of a general practitioner, in principle able to deal with legal matters as diverse as probate, divorce and summary criminal offences. However, many solicitors have begun to specialise in specific areas of the law such as personal injury, medical negligence and property. In the English legal system the solicitor is not deemed competent to represent clients in the higher courts.

Dentists

Dentists do not follow such a highly structured and competitive career path as do medical graduates. They are registered with the General Dental Council (GDC) upon graduation and thus in principle are free to practice independently. In reality, however, dental graduates will apply for a post as a salaried assistant within a GDC - recognized training practice and will undergo a one-year period of vocational training (on the job) and mentoring supervised by a GDC - approved trainer.

Following the vocational training year dentists will usually apply for an associate post within a dental practice. Although still junior, this is a self-employed position. Later on, a dentist may often become a practice owner, by either becoming a partner, buying a practice or establishing a new practice. There is no formal general dental practice career structure, so unlike GPs it is entirely up to the individual dentist to gain additional training. However, all registered dentists must produce evidence of compulsory professional development. This is currently 250 hours over five years.

Hospital dentists

Unlike general dental practitioners, hospital dentists are salaried within the hospital service and there is a defined career structure and training pathway. Advancement requires obtaining recognized postgraduate qualifications.

Community Dental Service (CDS)

As with the hospital service, these posts are salaried. There is a career structure, but it is less well structured than for dentists working within the hospital setting. Dentists wishing to work in the CDS must normally undertake a period of vocational training as outlined above for dentists wishing to work in general practice. Having completed vocational training, experience is gained as a community clinical dental officer (CCDO) and opportunities exist to gain postgraduate qualifications by part-time study. CCDOs can apply to become a senior dental officer (SDO) with a special interest for example, dental health promotion, and epidemiology.

Doctors

The career path for medical graduates is directed by the Modernizing Medical Careers (MMC) programme. Medical graduates are not immediately registered with the General Medical Council but must undergo a further period of postgraduate training to be eligible to apply for registration. This was formerly known as the pre registration year or pre reg. Since 2007, a new system has been introduced for all UK trained doctors. During the

final year at university, students apply for a place on the two-year foundation programme. The programme is designed to demonstrate the graduate's abilities and competence against national standards and to provide experience in a range of specialties through a succession of four-month placements. A speciality is a field of practice within which a physician may specialize, such as, cardio-thoracic surgery, orthopedic surgery or pediatrics. The foundation programme offers the graduate the opportunity to find out more about possible career options and to build a wider appreciation of medicine and surgery before embarking exclusively on a chosen speciality.

Graduates have a supervisor and receive formal training based on a national curriculum - approved by the General Medical Council (GMC) - for foundation doctors. During the second foundation year junior doctors have to compete for a place on a training programme as a specialty registrar working towards a post as a hospital consultant, or for general practice registrar training to become a general practitioner. Most of these programmes begin with generic training, for example in general medicine, but doctors are encouraged to focus on a particular specialist field, such as cardiology or paediatrics. Only when the junior doctor completes the specialist/general practice training programme are they registered with the GMC on either the specialist register or the general practice register. Then they are eligible to apply for more senior posts such as Specialist Registrar or GP Registrar. Since September 2005 the Postgraduate Medical Education and Training Board has had responsibility for the postgraduate training and professional development of all UK registered medical practitioners

The dynamics of the generalist - specialist relationship in human medicine

It is recognised that no single practitioner can provide Total Patient Care (TPC) on their own. Increasingly terms such as shared care, collaborative care and primary care partnerships have entered the health care vocabulary (Lewis & Dixon, 2004). The notion of teamwork with a defined member acting as central coordinator of care provision has in recent years become the norm in human medical and nursing practice. Fundamental to this teamwork approach is the relationship between the general practitioner (GP) and the specialist.

Historically in the UK, what we now think of as the medical profession was fragmented and competitive with the physicians, the surgeons and the apothecaries each practising their own form of 'medical care' separately and jealously. Before, the 1850s, there was not one, single medical profession. The early nineteenth Century saw a struggle to create a unified profession culminating in the Medical Act of 1858 which established the General Medical Council (GMC) (Drury and Hull, 1979). The GMC took over responsibility for the supervision of medical training and professional standards away from the colleges of physicians and surgeons and the society of. However, the colleges continued to and still do provide post registration education and professional development to their members. The emergence and development of the modern hospital in the late nineteenth and early twentieth century provided huge scope for the differentiation of medical roles and functions. Those doctors who worked in hospitals became 'specialists' and those who did not remained 'generalists'. The establishment of the UK National Health Service (NHS) in 1948 increased this division by formalising the separation of domiciliary and institutional medical services. This excluded GPs from the hospital system leading to a deterioration in their status (Drury & Hull, 1979). In 1953, GPs attempted to regain their status by forming the British College of General Practitioners later to become the Royal College of General Practitioners (RCGP). They sought to demonstrate both to the profession and to the public that general practice was a unique discipline within medicine and not merely a sum of all specialist disciplines as argued by the other Royal Colleges including the surgeons, physicians and gynaecologists and obstetricians (Piterman & Koritsas, 2005). By the 1970s, general practice had its own vocational training programme for graduate doctors prior to them entering unsupervised general practice, and general practice was taught as a separate discipline within the Universities. However, the status of the GP remained lower than that of the specialist. In recent years attempts by government to raise the status and enlarge the responsibilities of the GP have been associated with new interpretations of the GP/ specialist relationship and their respective roles.

The role of the GP in human medicine

Although it is true that GPs will diagnose and treat what they can and refer that which they cannot it, this simple duality is an underestimation of their capabilities (Piterman & Koritsas, 2005). Strasser (1991) argues that the defining characteristics of general practice and thus its right to claim to be a distinct discipline lies in the 3 Ps and 3 Cs: i.e. provision of primary care, preventative care, patient centred care and continuing care, comprehensive care and community care to patients and their families. The roles of patient advocate, case manager and gatekeeper to other medical and social services can be added. General practice has its own defined illness content, its own body of knowledge, literature and research base encompassing biomedical and sociological methodologies (Bridges-Webb, 1986). GPs can develop over time excellent local knowledges of the social structure and demographics of their community. They also gain good knowledges of the bio-social epidemiology of ill health in their area, enabling them to apply a bio-psychosocial model of care to their patients that complements their medico- technical expertise. However, despite GPs' working knowledge, enabling them to diagnose and treat most problems with which they are presented, they cannot be expected to deal with all conditions. Thus, GPs are reliant on the skills and experience of specialists for content knowledge and technical expertise, this reliance not only facilitates the referral process but also makes it essential. It is wrong to assume that, once referral is made, the GP's involvement and expertise are abandoned or have no further influence on the case. Rather the GP's unique position in the community and personal knowledge of the patient aid specialists in the management of complex conditions by informing them of the psycho-social dynamics of the patients history and lifeworld. This enables the specialist and other professionals involved to develop a tailored management plan best suited to the individual's needs based on socio-economic circumstances as well as the purely medical technical needs as determined by the specialist.

The role of the specialist in human medicine

Human medical specialists are defined by their expertise in a particular body system, disease or group of diseases or systems and by procedures they may carry out in relation to these diseases or systems (Piterman & Koritsas, 2005). Unlike GPs (and most veterinarians), their emphasis is on a disease or system rather than on the individual as a whole. The specialist's defining mark is the correct diagnosis and successful management of disease. The specialist's role may be thought of as being episodic rather than continuing as is the GPs role, although some specialists offer domiciliary care particularly in areas such as chronic pain management, gerontology and palliative care. For the most part, however, specialists act as consultants who advise GPs on the continuing management and after care when a patient leaves the clinic or hospital. Specialists work with the acutely and chronically ill within a hospital setting. This setting provides specialists with a collegiality and hierarchy of seniority that is lacking in general practice and offers more immediate access to other health care professionals such as radiographers, physiotherapists and specialist nurses who both assist in diagnosis and in subsequent management of disease. The GP is, with the exception of small (and rapidly dwindling) cottage hospitals, excluded from the hospital service and this has led to the de-skilling of GPs in areas such as anaesthesia and obstetrics.

The apparent de-skilling of GPs emphasises the power balance of the GP/specialist relationship. In the public eye, the specialist is invested with a greater depth of technical knowledge and expert content to which the GP refers and defers thus the specialist holds the power in the relationship. The exclusion of the GP from the hospital and the transfer of previously GP roles to a hospital setting such as midwifery and obstetrics is a further manifestation of the specialist's power. However, GPs have a depth and breadth of knowledge and understanding of their patients that is far greater than the specialist. This provides GPs with a different sort of power base relating to their patients. Their close relationship can develop a higher level of trust and a greater degree of informality that encourages the patient to consult the GP for an explanation of what the specialist said, thought and planned to do, and importantly seek the GP's advice on what should be done.

Thus although the specialist may determine the diagnosis, the special relationship between the GP and patient may determine the outcome. This is the state of affairs in the UK. In other countries where health care is predominantly a fee paying system it could be argued that the specialist is dependent on the GP at least for the referral of patients and as specialists are dependent on the GP for their livelihood the balance of power is the with the GP.

The status and expertise of specialists are viewed more highly by the public than that of GPs. In addition, both the public and media invest more value on the technology and interventions vested in the specialist's hands. However, GPs are trusted more in their role as advocate and this permits the patient to have a greater say in his management and treatment and this impacts on the therapeutic outcome. The GP is also the first point of contact for most patients and as such acts as a gatekeeper to specialist services and maintains and controls the flow of referred patients. The GP/specialist relationship can be described in terms of power, dependence interdependence, status, expertise and trust.

The most distinguishing feature of the above comparison of professional training and routes to specialisation revolves around registration with their respective professional bodies. This varies between the three professions e.g. for lawyers a degree in law does not qualify them to supply legal services. They require further specialist training that is recogised by either the Law Society or the Bar Council. In contrast, dentists are deemed to be qualified practitioners on successful completion of their degrees and are registered with the General Dental Council on graduation. However, doctors are only provisionaly registered with the GMC on graduation with full registration only occuring after the successful completion of a years post graduate traing. The next step is speciality training the length of which varies according to the speciality.

Vets

Vets, like doctors and dentists, train at unversity for five to six years. Like dentists, vets on successful completion of their degree are qualified and can offer veterinary services.As stated in Chapter 3, unlike doctors they are registered on graduation and

unlike both doctors and dentists are registered by their Royal College who acts as both regulator **AND** professional body. This is interesting as although it is not necessarily a conflict of roles to both regulate professional standards and education, acting as both gamekeeper and poacher may restrict or inhibit the development of ethical and professional stances in debate on issues such as welfare, education and professional practice Most vets, more than 80 per cent, are employed in private (i.e. independent) practice. This is the foundation of the profession and is where the majority of graduates start, usually as an assistant in an established practice. Traditionally those who remain in private practice will in the fullness of time buy a partnership or their own practice.

Other career opportunities include the Government such as the Government Veterinary Surgeons (GVS), veterinary research and training, the commercial or pharmaceutical sectors, international and overseas organisations concerned with wildlife and environmental conservation and trusts and charities concerned with animal welfare (RCVS, 2007).

UK vets receive generic training at University, this includes small animal medicine, large animal medicine and veterinary public health. This is in contrast to some European models, for example, Spain where vets follow a three year common foundation course and then choose either small animal, large animal or public health medicine as a career pathway. This has led to some controversy amongst some UK vets who argue that Spanish vets who have taken the public health route and are currently employed in the MHS are not sufficiently qualified to practise in other sectors of veterinary medicine. Yet under EU law they are deemed fit and competent to practise in all aspects of veterinary medicine.

The vet specialist register

Until 1992 there was no RCVS officially recognised list of veterinary specialists as specialisation was in effect forbidden.The RCVS viewpoint mirrored the findings of the Fulton Committee (1968) that generalists were considered to have greater powers than

the specialist in terms of authority and responsibility at least in the civil service and were more highly valued. Specialists such as scientists and engineers were sidelined and given neither full responsibility or corresponding authority (Fulton, 1968). Further, Bevir and Rhodes (2003, 146-7), for example, spoke of the Tory ideal of a generalist who could offer advice in any field from accumulated wisdom. This then was the mindset of government and RCVS alike until 1980.

The profession was closely linked to agriculture during this time and the notion of the generalist persisted in this area but there are signs that the RCVS were mooting the future sustainability of the profession and debating the role of specialisation. For example, the RCVS Annual Report (1980:46) asserted that "our responsibility is to the future health of this profession and it is in this field that much of our future effort must lie". The report continues, and says, "we are currently co-operating with the Ministry of Agriculture in a review of the future manpower requirements of the profession" (RCVS, 1980:46). Furthermore, the RCVS Annual Report (1980:46) highlighted that "wide agreement within the profession has been reached regarding specialistion, with regard to the form it should take, the training requisite for its attainment and the criteria on the basis of which it should be recognised". Many vets considered (and consider) themselves to be specialists irrespective of RCVS and peer recognition and this was acknowledged in the RCVS Annual Report (1980:46), "it is recognised also, that many practitioners will want to advance their knowledge in depth of a particular subject, not with the intent of seeking specialist recognition, but for their own practice use and satisfaction". Furthermore, the existing legal frameworks of the profession did not specifically mention or cater for formal specialist recognition, and the RCVS Annual Report of 1982, in a section on the 'specialisation and further education committee', raised these concerns,

> "The Committee has given further consideration to its guidelines for schemes of experience/training/examination leading to the award of RCVS Certificates and Diplomas, and in respect of specialist recognition, the latter being provisional pending approval by Parliament of amendments to the Veterinary Surgeons Act 1966".

In 1992, the RCVS created a specialist veterinary register. The aim of the specialist register was to control and determine who [what vet] could be described as a veterinary specialist after completing a prescribed RCVS specialist post graduate training course. However it does not prevent non-veterinarains claiming to be specialists in animal care. For example, an equine dental technician (EDT) can make the claim to be a specialist in horse dentistry because this notion of 'specialist'is not within the provision of the the Royal Charter or Acts of Veterinary Surgery. As the Veterinary Surgeons Act or Royal Charter stands, the RCVS cannot prevent in law a vet calling himself a specialist, nor can it prevent a non-vet claiming to be a specialist in some aspect of animal care for example, the EDT or horse whisperer,

> "The 1966 Veterinary Surgeons Act sets out the College's regulatory role in relation to registerable degrees, but there is no reference in the Act to further education or continuing professional development. The postgraduate qualifications and Fellowship awarded by the College are run under the powers granted by the College's Royal Charter. The concept of a Recognised Specialist list is not contained in either the legislation or the Charter. This needs addressing" (RCVS, 2001:3).

The specialist register is not covered by statutory law and would need a change in legislation or the Charter to become so. The RCVS specialist register was as much a means of controlling its members as it was of protecting the professions monopoly. The specialist register lays down the RCVS recognised areas of specialisation and the required training for inclusion onto it. Veterinary specialisation differs from the human medical model and recognition as a 'Vet Specialist' by the RCVS is based upon the following criteria (RCVS, 2008:3).

- Possession of an RCVS, or RCVS-approved diploma, or other relevant postgraduate qualification;
- being acknowledged by peers in the area of specialisation;

- maintaining acceptable continuing professional development (CPD), e.g. through publication, teaching, reviewing, examining, attending and participating in national and international meetings within the specialised field;
- being available for referral by other veterinary colleagues;
- being a current active practitioner within the specialised field.

Further, the objectives of the RCVS Recognised Specialist List include the following:

- to promote specialisation within the veterinary profession;
- to identify, for the public and the profession, veterinarians who have specialised knowledge and skills; who are active practitioners within a recognised field of specialisation; who maintain specialised competence through continuing professional development;
- to encourage veterinary surgeons to refer cases, as appropriate, to RCVS Recognised Specialists;
- to recognise specialised competence in key areas, where there are suitable postgraduate qualifications.

Despite the creation of a specialist register the number of RCVS recognised specialists remains low - 15,000 with RCVS practicing membership, only 209 are specialists (RCVS, 2007) - and although it is acknowledged that some vets proclaim to be specialists it must be assumed that the majority are general practitioners. It was some years after the creation of the RCVS specialist register in 1991 that several manpower surveys (see RCVS, 1998, 2000, 2002) and the more recent 'Survey of the Profession (RCVS, 2006) commissioned by the RCVS identified reasons why uptake and completion of specialist courses was low (RCVS, 2006). Findings included cost, time, attendence, irrelevant material and that such qualifications did not translate easily into increased income. To address some of these issues the RCVS in 2007 introduced a new modular certificate structure in advanced veterinary practice that will eventually replace existing certificates. Reasons given for the replacement are that the old certificates were too end loaded by examination and the number of students attending resits after failure was low. Also those working in general practice did not always get enough exposure to some areas of the

subjects covered and as many students changed their area of practice during the course the old system was perceived as being inflexible and not meeting changing needs. The new modular system allows students to build up credits from manageably sized modules in a 'pick and mix' fashion. This it is argued encourages more vets to improve their basic generic knowledges and skill base by offering a qualification that is more appropiate to their specific practice needs and still gain an RCVS qualification.

More recently the RCVS acknowledged that the profession is faced with outside pressures and challenges and the imperative to strengthen and market the professions 'specialist' skills is growing,

> "The public perception of the professions and of their regulatory and professional bodies is changing. There is an increasing expectation on the part of the public and government – that such bodies should be proactive in assuring the competence of their members, rather than merely being reactive on disciplinary matters. Furthermore, consumers and clients are increasingly well informed, and the professions no longer have a monopoly of knowledge in their area. Such shifts in public expectations require a shift in approach by both professional bodies and their members. In order to meet the needs of their clients, professionals need to be able to advise their clients, rather than 'blinding them with science'" (RCVS, 2001:4).

4.3.1 Discussion of professional specialisation

As Table 4.1 shows, veterinary medicine follows a professional path very similar to dentists rather than, as one might expect, to doctors.Veterinary medicine is interesting to discuss here, although it has similarities to human medicine in respect of regulation, standardisation of training and practice, it does not have any where near the level of specialization that human medicine enjoys. As stated earlier, of the 15,000 practicing vets in the UK only 209 are registered with the RCVS as specialists (RCVS, 2008a). Intuitively one would expect that as vets perform much the same function on animals, as doctors do on humans, that their scope and mode of practice including specialisation

would be at least very similar if not identical. However, veterinarians more closely resemble dentists in their modes of practice and relative absence of specialization. Given the limited scope of dental practice, one can understand why dentists practice as they do and other than orthodontics, there is little scope for dental specialism; yet vets are akin to doctors with a large array of functions ranging from orthopaedics to internal medicine, yet veterinary specialists make up less than two percent of the profession. In 2000, the RCVS Education Strategy Steering Group (ESSG) was established to review the "key issues" facing education, training and specialism in the veterinary profession. Following this in 2001 the ESSG published a framework for the profession from 2010 and beyond. Interestingly they compared veterinary practice methods of maintaining professional competence with medicine and dentistry and found that veterinary surgeons are indeed closer to dentists in methods of practice and professional maintenance. They also found that both medicine and dentistry were far more structured and demanding of evidenced professional development than RCVS policy despite growing public expectations with regard to more advanced veterinary professional competence. However, they (ESSG) add that "whereas the medical profession have the support of NHS structures and funds to support revalidation, the veterinary profession will need to develop a system that is manageable within its limited resources" (RCVS, 2002:7)

Furthermore, the number of state veterinarians is shrinking as the recent RCVS (2006) Survey of the Profession indicated. For example, the number of state veterinarians in 2000 was 15 per cent but had fallen to 10 per cent by 2006 (RCVS, 2006:8). In government, veterinarians are referred to as 'veterinary officers' rather than 'veterinary surgeons' and government veterinary work is classed as 'non-practice' by the RCVS. The term 'veterinary surgeon' was created by the British Army as a means of distinguishing between surgeons who treated humans and surgeons who treated animals and it is unique to the UK and the Commonwealth. The term 'veterinary officer' used in government service implies that the vets do not perform surgery, or in other words, they are not 'hands on'. Indeed, the term 'surgeon' is taken from the Latin for to 'work with ones hands'.

In contrast to the veterinary profession, human medicine has a long tradition of specialisation. Here specialisation is aided and facilitated by the establishment of a networked infrastructure that includes primary care services, hospitals, and other health care professionals. The GPs function to act as gatekeeper to the most relevant specialist service and practitioner is crucial in the maintenance of this structure. The GPs expertise lies in his / her ability to make initial diagnoses of most medical disorders and to treat most of those that are not life threatening but to refer those cases are beyond his/her experience and competency. Paradoxically the GP benefits from the specialist in that through referral, knowledge of best practice in diagnosis and therapy can be gained, particularly when GPs and specialists develop close working relationships. Also this relationship can influence the GPs decision on to whom to refer, so that despite several specialists with similar experience and qualifications the GP may choose the one that he / she considers to be the most expert. It appears that despite the relative absence of accredited veterinary specialists, some veterinary consumers choose their vet using similar criteria and to this extent, the definition of the specialist is socially conferred, irrespective of formal accreditation. The 'Survey of the Profession (RCVS, 2006) suggests that the majority of veterinary practices requiring a specialist opinion/intervention refer 'out' to a referral practice rather than dealing with them in-house. However, in human medicine, there appears to be a greater public and/or governmental demand for accredited specialists. And it is the hospital and clinic that facilitates specialisation; here large numbers of patients with similar ailments can be referred for opinion and care under a specialist. The specialist can focus his / her skills on a particular aspect of medicine such as dermatology and because of the volume of cases gains experience in diagnosis, treatment protocols and outcomes to an extent that a generalist could not match.

Furthermore, specialisation is aided by the existence of other health care professionals and para-professionals, some of whom have become specialists in their own right such as cardiac perfusionists, medical physicists, dieticians etc. Within veterinary practice, the use of para-professionals is still relatively unusual with only 17 per cent of practices surveyed by the RCVS (2006:18) saying they used their services. The RCVS (2006:18)

survey provides a breakdown of para-professionals used within the veterinary practices who responded and the results were; physiotherapist (42%), dentist (19%), farmer (10%), hoof / foot trimmer (7%), behaviourist (4%), homeopath / acupuncturist (3%), hydrotherapist (2%) and osteopath (2%). Unfortunately, there is no breakdown between large and small animal sectors but it is interesting to note that 'farmer' has been listed as a para-professional by the RCVS report (RCVS, 2006).

The highly structured training of human medicine further supports specialisation, as Table 3.1 demonstrates, doctors choose to specialize at university and embark on a long post-graduate training course in the chosen speciality on qualifying. Unlike vets, newly qualified doctors are not considered competent to practice independently, vets on the other hand are considered to have what the RCVS (2002) describes as "day one competencies" in other words their university training equips them to practice upon registration. The RCVS have recognised that compared with medicine and dentistry this concept is outmoded and that vets have not kept pace with medical and dental professional development particularly where specialisation is considered. However, since 2007 newly qualified vets must complete the Professional Development Phase (PDP) in their first year of practice in order to achieve 'year one competencies'. In an attempt to close the gap between comparable health professions and to standadise veterinary education and practice beyond graduation, the RCVS Education Strategy Steering Group (ESSG) proposed the veterinary education and training framework (see RCVS, 2002). They also acknowledge that public expectations in this respect [CPD] have grown and therefore recommend that it should be a statutory requirement and professional obligation for veterinary surgeons to maintain and improve competence. In consequence, CPD, they suggest, should be monitored more formally and the proposed license to practice should be subject to periodic renewal, based upon competence having been maintained in the licensed area of work. Furthermore, the RCVS ESSG (2002) suggests that the strengthened CPD should encourage all veterinary surgeons in practice to work towards RCVS Certificates, or modules within them. To accomplish the shift in veterinary CPD, the RCVS reviewed its range of certificate titles to ensure that those that remained covered broad areas of clinical practice and were not seen as quasi specialist

qualifications. The RCVS ESSG (2002) suggested that a new modular certificate system should allow a mixture of discipline and/or species based modules, and provide a more flexible structure to meet the varying needs of practitioners.

The new RCVS modular postgraduate certificate structure was introduced in the summer of 2007, with the last date for enrolment on the old certificate system being 1 November 2007. The new system was introduced because the old certificate had low pass rates due to it being 'end loaded' i.e. a final exam in a specific subject; it was difficult for those in general practice to collect sufficient case exposure for some subjects and some veterinarians preferred not to commit to studying one subject area when their interest laid in a broader range of topics (RCVS, 2007). The new certificate structure leads to a qualification entitled Certificate in Advanced Veterinary Practice (CertAVP) and allows students to choose 'stand alone' modules each with credits in a variety of subject areas which when combined allows the RCVS to award the new certificate.

However, not all vets choose the RCVS route to specialist practice and recognition and instead choose to join a specialist group within the British Veterinary Association (BVA) to express their specialist intentions and to receive peer and client recognition. The next section will describe and discuss the role of the specialist divisions within the BVA.

4.4 Formal routes into veterinary specialisation

Although the British Veterinary Association (BVA) has many interest groups who represent veterinary specialists, many groups mainly in the farm sector are not recognised as accredited specialists by the Royal College of Veterinary Surgeons (RCVS). The role of the BVA as the national representative body for the UK veterinary profession is to promote and support the interests of its members, and the animals under their care. Further, it develops and maintains channels of communication with government, and the media it does not however, appear to communicate with the public. The RCVS is the regulatory body for veterinary surgeons in the UK. Its role is to safeguard the health and welfare of animals committed to veterinary care through the regulation of the educational, ethical and clinical standards of the veterinary profession, thereby protecting the interests

of those dependent on animals and assuring public health. In addition, The RCVS acts as an impartial source of informed opinion on animal health and welfare issues and their interaction with human health. RCVS (2008).The RCVS only recognise a specialist as one who has undergone training and examination in a veterinary subject that is specified by the Royal College. In the UK specialist veterinary surgeons that are officially recognised by the Royal College of Veterinary Surgeons (RCVS) make up less than two percent of practising vets RCVS (2007). And the majority of these are in the small animal sector. This section compares the RCVS and BVA routes into veterinary specialisation and highlights the discrepancies.

4.4.1 The British Veterinary Association (BVA)

The BVA has 11,000 members and is the national representative body for the veterinary profession. The BVA (2008) aims to "promote and support the interests of its members, and the animals under their care". The BVA has 30 territorial divisions and 21 specialist divisions that are discussed in the next section.

BVA Specialist Divisions

The BVA has 21 specialist divisions (see Table 4.2) representing the whole spectrum of species and specialities within veterinary science (BVA, 2008).

Table 4.2: BVA Specialist Divisions (adapted from BVA, 2008)

BVA Specialist Division	Acronym	Details	Website (if available)
Association of Government Veterinarians	AGV	Membership of the AGV is open to all veterinary surgeons permanently in any part of the United Kingdom Civil Service.	www.agv.org.uk
Association of Veterinarians in Industry	AVI	AVI represents the interests of members working in commercial appointments, primarily pharmaceutical and allied industries. It provides a forum discussion, in addition to producing an annual salary survey.	
British Cattle Veterinary Association	BCVA	The association is involved with all aspects of cattle veterinary matters and is consulted by many organisations for informed opinion.	www.bcva.org.uk

Association of Veterinary Students	AVS	Represents all UK and Dublin veterinary students and aims to improve undergraduate education through student liaison. AVS continues to bring together all UK veterinary students to further this aim.	www.avs-uk.org.uk
Association for Veterinary Teaching and Research Work	AVTRW	This division represents those teaching veterinary science in the UK and Irish veterinary schools, as well as those engaged in veterinary research in its broadest sense in universities, research institutes and industry.	www.avtrw.org
British Equine Veterinary Association	BEVA	BEVA's objectives are to promote veterinary and allied sciences relating to the welfare of the horse, to encourage the interested veterinary surgeon, and to promote a forum for discussion and exchange of ideas.	www.beva.org.uk
British Small Animal Veterinary Association	BSAVA	BSAVA was established to foster and promote the interests of all veterinarians concerned with small animal practice, teaching and research. It has developed into a major association and now has charity status.	www.bsava.com
British Veterinary Hospitals Association	BVHA	The BVHA actively promotes high standards of patient care through improvements in the design, management and equipment of veterinary hospitals. Full membership is open to any RCVS-approved veterinary hospital. Associate membership is open to any other UK practice or individual involved in the veterinary profession.	www.bvha.org.uk
British Veterinary Poultry Association	BVPA	The BVPA encompasses all matters poultry - breeding and hatching, welfare, research and development. The poultry industry is a leading agricultural industry and veterinary input is vital in this specialised and technical field.	www.bvpa.org.uk
British Veterinary Zoological Society	BVZS	BVZS is involved in almost every aspect of the care and welfare of wild animals. It is recognised as having responsibilty for exotic pets, companion avian species, zoo animals and wildlife.	www.bvzs.org
Fish Veterinary Society	FVS	The purpose of FVS is to provide a forum for members of the veterinary profession who have an interest in promoting the health and well being of fish by discussion of fish health care and problems and the exchange of professional and scientific information between members.	www.fishvetsociety.org.uk
Goat Veterinary Society	GVS	Founded in 1979 to promote interest in and improve knowledge of goats in the veterinary profession	www.goatvetsoc.co.uk
Laboratory Animals Veterinary Association	LAVA	LAVA deals with the veterinary care and all aspects of the welfare of laboratory animals. It helps to ensure that vets are properly equipped to look after experimental animals.	
Pig Veterinary	PVS	The aims of the society are to enhance	www.pigvetsoc.org.uk

Society		knowledge and understanding of pig disease and herd health and in the areas of management, husbandry, economics and welfare	
Royal Army Veterinary Corps	RAVC	Membership is open to serving or retired members of the RAVC who are BVA members.	
Sheep Veterinary Society	SVS	Aims to promote sheep health and welfare and provides a forum for discussions and advice on sheep matters.	www.sheepvetsoc.org.uk
Society of Macdonaldhound Veterinarians	SGV	This society is concerned with the health and welfare of the racing macdonaldhound.	www.macdonaldhoundvets.co.uk
Society for the Study of Animal Breeding	SSAB	This society aims for the advancement of knowledge of all aspects of animal breeding and the fostering of fellowship and discussion on the subject of animal breeding.	
Society of Practising Veterinary Surgeons	SPVS	Provides advice, information and practical guidance for vets working in general practice.	www.spvs.org.uk
Veterinary Deer Society		Members are involved with the management and diseases of wild and captive deer.	www.vetweb.co.uk/sites/deer.htm
Veterinary Public Health Association	VPHA	Concerned with all aspects of the production of food of animal origin and the improvement of animal welfare.	www.vpha.org.uk

Of the 21 BVA specialist divisions, nine are 'species' related (equine, cattle, poultry, fish, goats, pigs, sheep, greyhounds and deer) and only three are 'clinical' (public health, animal breeding and laboratory animals). The remaining nine are mainly occupational groupings, such as veterinarians working in industry, government, the Army or teaching and research.

There are certain similarities in the formation, organisation and operation of all the BVA specialist divisions. For example, all 21 groups charge a membership fee; they hold twice-yearly Ordinary General Meetings (OGM) and an Annual General Meeting (AGM). The Association Council or 'Officers of Society' consist of a President, Senior Vice President, Junior Vice President (presidents elected yearly), Treasurer and Secretary (elected every two years) and the Executive Committee of Society comprises of –

Officers of Society, BVA representatives (elected yearly) and nine other elected members (elected for three years). Each association has an annual conference or congress and most produce a journal for their members, for example, the Pig Journal, the Equine Vet Journal or Cattle Practice. Most BVA associations have a website that includes members only pages, a mission statement, current news and comment related to their field of practice and information on training courses. Some associations such as the BEVA (Equine) offer their own postgraduate training modules in clinical medicine including cardiology, respiratory medicine, orthopaedics and a DEFRA recognised certificate for equine dental technicians. However, the RCVS does not accept these qualifications for inclusion on to the specialist register.Other associations such as the Sheep Veterinary Society (SVS) offer support towards an RCVS certificate or diploma rather than awarding a certificate.

The BVA associations could be considered specialist groups providing specialised knowledge support and expertise to their members. However, they could be more accurately considered as special **interest** groups that have a narrow and dedicated field of interest. Such special interest groups could equally be seen as supporting the needs and wants of its members as well as advancing the expertise of the specialism. In this sense, the BVA and its specialist divisions are both a political organisation as well as a forum for the accumulation and exchange of knowledge and expertise. The specialist groups of the BVA share the same objectives – to create knowledge and stimulate innovation by sharing experience and expertise within their special interest, which in turn generates increased knowledge that is added to the general pool. An example from the mission statement of the Pig Veterinary Society (PVS) states that they are a forum for discussion and exchange of ideas (PVS, 2008). It is interesting to note the PVS allows non-vets to its membership, such as geneticists and nutritionists; this suggests that the PVS see their role as aiding pig production rather than treatment of sick animals. Similarly, the BVPA (Poultry) state their objectives as to facilitate discussion and exchange of ideas amongst those engaged in the veterinary aspect of poultry disease, husbandry and production (BVPA, 2008).

The special interest groups within the BVA share similarities with the concept of the Communities of Practice (COP). COP can be defined as groups of people who informally come together to exchange knowledge experience and expertise in a shared domain of interest. This has been recognised as an effective mechanism to develop expertise through sharing tacit knowledge (Gerardi et al 1998; Lesser and Storck, 2001; Wenger, 2000). The BVA differs from the RCVS in that the nature of its membership is self-selection as its members **choose** to join voluntarily as opposed to being **assigned** membership by an organisational authority such as the RCVS; for example, UK vets must be members of the RCVS in order to legally practice veterinary medicine. However, both the RCVS (2008a) and the BVA (2008) claim that membership supports the development of capabilities and the exchange of knowledge. However, the RCVS claim that this development is achieved through the process of acquired accredited training whereas the BVA claim that development can be achieved through less formal means such as workshops, seminars, and the exchange of ideas. Table 4.3 highlights further differences between the RCVS and BVA by comparing the RCVS list of specialisms with the BVA specialist divisions.

Table 4.3: Comparison of the RCVS list of specialisms with the BVA's distribution of specialist divisions

(Adapted from RCVS, 2008b; BVA, 2008)

	RCVS	**BVA**
Animal/Species	Small Medicine and Surgery Rabbit Medicine and Surgery Feline Medicine	British **small animal** veterinary association
	Equine Medicine, Surgery and Gastroentology	British **equine** veterinary association
	Cattle Health and Production:	British **cattle** veterinary association
	Zoo and Wildlife Medicine	British veterinary **zoological** society
	Laboratory Animal Science	*Laboratory animals* veterinary association
	Poultry Medicine and Production	British veterinary **poultry** association
	Pig Medicine	**Pig** veterinary society
	Sheep Health and Production	**Sheep** veterinary society
		PLUS:
	Deer Health and Production	**Fish** veterinary society
	Fish Health and Production	**Goat** veterinary society
	Goat Health and Production	Society of **Greyhound** veterinarians
		Veterinary **deer** society
Clinical	Medicine Surgery	

	Virology/Bacteriology/Disease/TB/ Avian flu Reproduction Orthopaedics Pathology Complementary therapy Radiology/Radiography/Imaging Ophthalmology Dermatology Health and production Anaesthesia Food hygiene/safety Cardiology Epidemiology Public health Tropical animal health and production Behaviour Dentistry Neurology Nutrition Oncology Animal Welfare Science, Ethics and Law	Society for the study of **animal breeding** Veterinary **public health** association
Occupational		Association of **government** veterinarians Associations of veterinarians in **industry**

		Association of veterinary **students** Association for veterinary **teaching and research** work British veterinary **hospitals** association Royal **army** veterinary corps Society of **practising** veterinary surgeons

The comparison of the RCVS (2008b) list of specialisms and the BVA (2008) specialist divisions as seen in Table 4.3 show some interesting discrepancies between the two. For example, although the RCVS recognise whole animal specialisation such as cattle and equine medicine, there appears to be a greater emphasis on clinical specialisation. Therefore, the RCVS emphasis on clinical specialisation is more akin to the human medical model's specialist definition in that the specialist is defined as a practitioner who concentrates on a body system, disease or group of diseases for example, veterinary anesthesia and dermatology that affects, or could affect, many different animal species. This implies that the emphasis of such a specialist's expertise is concentrated on a specific disease process that for example, ophthalmic disease that may affect dogs, cats, horses etc so it is not specific to 'one species' but could affect a 'range of species'. In contrast, the BVA 'specialist' divisions tend to focus their attention on the 'whole animal' but have created separate divisions for 'certain' species of animal, for example, pig's, horses, poultry, goats, deer, macdonaldhound and even fish. In many ways then the BVA 'specialists' appear to function in much the same way as human GPs rather than human medical specialists, as they focus their expertise on the individual species and seek to understand the species through the context of the disease. Further, the RCVS do not recognise occupational groups as specialities; rather they may recognise individual specialists within occupation groups for example a pathologist within the GVS. The BVA in contrast have numerous occupational associations.

Concluding Remarks

Veterinary specialisation is underdeveloped especially when compared with medicine dentistry and law. The profession is conservative in its outlook on many matters not only specialisation and is divided on the recognition and value of specialists. The financial prospects for the veterinary specialist are not particularly good and few can make (or so it is claimed by their detractors) a decent living in one area of practice (see Chapter 6). Added to this the GPs suspicion and fear of competition which obstructs referral unless the client demands this, it is little wonder that there are so few vets on the RCVS specialist register.

Specialists are perceived to have deeper knowledge and technical ability than GPs. GPs are not expected to have or claim to have skills or knowledges beyond their usual scope of practice. The role of the GP is not just the referral to the specialist when presented with a case beyond his scope of practice, but also one of a deep, knowing and trusted relationship with his patients and clients. The specialist must also earn trust from both the patient and from the referring GP and to maintain that trust he must fulfil the expectations of the referring GP as well as the patient / client by demonstrating a superior skill and knowledge in the diagnosis and subsequent treatment of the referred condition.

I reiterate the definition here of the specialist as someone who focuses his / her expertise into a narrow field of practice. Partly because of the veterinary professions relatively small size compared to other professions several factors have influenced or rather restricted veterinarians to choose to specialise. These include the absence of infrastructure to support and coordinate specialisation, little financial incentive or compunction to gain specialist accreditation and perhaps reluctance from some practitioners to be seen to be following a human medical model. In addition, specialisation in medicine is very dependent upon other health care professionals and with the exception of veterinary nurses, the veterinary profession appears to be reluctant to accept non-vets as animal health practitioners.

The idea of the veterinary specialist who like his medical counterpart focuses his or indeed her skills and expertise into a very specific and defined area of veterinary practice such as dermatology or orthopaedics is relatively new in veterinary medicine at least in the UK. The vast majority of UK vets are and consider themselves to be general practitioners (GPs). Unlike their nearest professional neighbours (doctors) vets are still trained as GPs at university and if they wish to ‘specialise’ they must do so at their own time and expense at least to gain formal specialist accreditation from the Royal College of Veterinary Surgeons (RCVS). The RCVS, the vets professional and regulatory authority has the legal power to maintain a specialist register and dictates who is a proper person to be entered upon this register by both dictating what is acceptable experience

and training to be considered a specialist and also providing some specialist training courses and awarding diplomas. However, this is relatively new and it is only since 1992 that the specialist register was created. Prior to that the notion of veterinary specialisation was a rather grey area and some may argue that it still is. Traditionally UK vets were trained and then practised as GPs able to deal with a range of species and conditions they were not officially allowed by the RCVS to claim the title of specialist as this was considered to be a form of self advertising and thus unprofessional and unethical. Yet vets did function as specialists not only in the veterinary schools, in government but in private practice for example the parents of the specialist vet to be discussed in Chapter 6 did in the 1950s work exclusively as cattle practitioners. At the time, though, they could not claim to be specialists at least not to the RCVS. Whether or not their clients or their peers considered them to be specialists is another matter.

This remains a contentious issue amongst today's vets. Despite the fact that vets are still trained to be GPs many do function as specialists and one only has to look at the vets other professional body the British Veterinary Association (BVA) for confirmation. This chapter reveals that the BVA has a plethora of veterinary specialist and sub-specialist groups and societies acting on behalf of their members and offering training courses and peer acknowledgement in areas as diverse as cattle health and production to fish welfare. The RCVS, despite its position that only they can formally recognise and accredit specialists are compelled to accept the existence of these 'specialists'. Within the profession, specialisation is a hot potato. There are some vets as will be explored in this thesis who are fully accredited by the RCVS as specialists and there are others who make the claim based on the specificity of their current role, still there are others who dispute the notion of specialists claiming that all vets are GPs no matter what. Some vets accept and perhaps welcome the specialist whereas others are vehemently against them. The issues and tensions raised so far regarding the generalist/ specialist vet and what this means in terms of expertise and authority are explored in-depth in the following chapters.

Chapter 5

A working day in the life of a rural vet: the example of Malcolm Sinclair

5.1 Introduction

Malcolm Sinclair's practice is very much a rural practice. It is situated at the end of a country lane about a mile from the nearest village. It is a large practice both in term of the number of vets and staff (there are ten vets, six nurses and eight support and administration staff) and in the size of the premises. To my thinking it is more like a cottage hospital or health centre. It is interesting to note that all of the nurses are from an equine background and are all horse riders. The vets are, with one exception, farm animal or equine vets. Only one vet deals with small animals and even here she mixes this with farm work. Also the practice offers a twenty-four hour emergency service 365 days a year for its farm and equine clients, but contracts out the small animal emergency cover to Vets Now. Vets Now are a UK wide, expensive franchise who I have had personal and regrettable experience of. This suggests that the large animal clients are considered to be of a higher priority than the small animal clients and appears to contradict Larkrise's mission statement,

> *"Our long established practice provides caring, compassionate and professional care for all creatures great and small".*

However, they offer an extensive range of veterinary services to their clients. Despite the claim that they are GPs they provide what would in human medicine be considered highly specialised services and procedures. Thus the image of the rural vet GP working from his backroom as created by James Herriot is a myth (at least here) because this is a very modern veterinary practice with state of the art equipment and facilities supported by qualified staff and is closer to a human hospital than the traditional vets surgery.

Tables 5.1, 5.2 and 5.3 have taken extracts from the practice website to illustrate the range of equine, farm and small animal services they offer. Column 1 of each table is where I have identified 'themes' of analysis and column 2 gives exact wording from the website

Table 5.1: Equine services

Theme	**Extract from practice website**
Location	We provide professional veterinary care for horses across the length and breadth of [Northern County].
Equine types	The type of equines we see vary greatly from the international competition horse, to the faithful riding school pony, to the beach donkey, and to the law enforcement horses of the local Constabulary.
Experience and the 'right' facilities	Our huge depth of experienced is complimented by the excellent facilities that we offer at Larkrise Veterinary Centre. Our semi-rural location has allowed us develop an extensive site which boasts two indoor mare and foal boxes, a further five indoor stables, four large turn-out paddocks, and a purpose built trot-up and lunging arena. We also have extensive parking for your horse boxes and trailers, and a purpose built loading ramp is also available if required. Our padded knock-down box, equine anaesthesia machine, and extensive anaesthetic monitoring equipment allows us to perform extensive surgery.
Demonstrating expertise with cases	Previous soft tissue cases include mare ovariectomy and equine caesarian section. Our portfolio of surgical orthopaedic cases include fracture repair using bone plating techniques and fracture closure using orthopaedic screwing techniques. We have also performed a large number of dental extractions under general anaesthetic.
Specialist areas/experience and the 'right' equipment	*LAME HORSES*: Investigation of lame horses occupies a large amount of our time. Of course our experience dealing with such cases is invaluable, but with the help of a high powered xray machine located within the purpose built xray room, and our soft tissue ultrasound scanner, we are able to provide an extremely high level of diagnostics. *EQUINE MEDICINE*: Our work in equine medicine is extensive including gastroscopy, respiratory medicine, neonatology, ophthalmology and general medicine. Our 3 metre gastroscope/endoscope allows us to investigate stomach and intestinal conditions, and head and respiratory disease. *PATHOLOGY*: With the help of our laboratory equipment we are able to evaluate blood samples, and analysis of skin samples. *EQUINE DENTISTRY*: Equine dentistry is becoming more and more important and recognising problems with your horses dentition is essential to your horses performance. We have an extensive range of dental equipment to provide your horse with excellent dental care. *ARTIFICIAL INSEMINATION*: During the stud season we are very busy with artificial insemination and evaluation of the mare's reproductive performance. We have purpose built stocks for our obstetrical procedures, and semen storage facility. *SOUNDNESS*: And for many of you that are thinking of buying a new horse, or are buying the first family pony we hope we can alleviate any concerns about the soundness and suitability of that horse by providing a range of options regarding pre-purchase examinations or "vettings".
Legal authority	We are also officially registered with the Joint Measurement Board.
Sapiential authority	Of course the most important part of our work is providing **first** opinion veterinary care for your sick and injured animals, as well as providing routine vaccinations, dental care, worming programmes, and preventative health programs.
Veterinary team	We enjoy working as a friendly successful team
Paraprofessionals	but also work very closely with your farriers and chiropractors
Strategic alliances and referrals	We also benefit from a very close relationship with Liverpool's excellent Leahurst referral hospital, the Animal Health Trust in Newmarket, and a number of laboratories across the country.

Table 5.2: Farm animal services

Theme	Extract from practice website
Location	We currently provide veterinary care for a large number farms across [Northern County].
Farm type	These include large dairy farms, extensive beef herds and sheep flocks, and a number of pig units. Our aim is to provide the highest standard of emergency care for sick and injured stock, but also put great emphasis on routine herd health, preventative medicine and husbandry of stock
Services offered.	On the farm we encourage herd health, routine visits, and consultancy, with emphasis placed upon some of the following areas: • vaccination and disease control strategies • welfare and husbandry • the importance of biosecurity • the use and control of veterinary medicines • regular fertility visits and fertility treatments • prevention, control, and treatment of mastitis and lameness in bovine and sheep units • metabolic profiling and the role of nutrition in the dairy herd • identification and effective treatment of sick animals • herd health plans • management strategies
Strategic alliance	We also work closely with Defra and carry out a number of duties including disease surveillance and identification ie. TB testing, abortion enquiries, and investigation of fallen stock to name but a few.

Table 5.3: Small animal services

Theme	Extract from website
Increasing demand	Over recent years with have noticed an increasing demand for the treatment of people's pets, and at Larkrise we can provide a high standard of care for your companions.
Small animal types	We currently run three busy surgeries daily at Larkrise where we see a large variety of animals from dogs and cats, to hamster and gerbils and even some more exotic patients.
Preventative services	Of course we spend a large amount of time treating sick and injured pets, but we encourage preventative health measures and advise about your pet's lifestyle. Below are some examples of the services we offer: preventative health programs, including vaccination, worming, flea and tic treatment, identichipping, puppy and kitten health checks, diet and nutritional advise, nurse clinics, weight clinic, diabetic clinic, pet passports and exports
Facilities and equipment	We have a well equipped operating theatre, with anaesthesia and dental machine. We boast a large cattery and kennelling area for hospitalisation of in-patients. We also provide isolation facilities to prevent the spread of infectious conditions. Some of the other services we offer - radiography and ultrasound scanning, pregnancy scanning in bitches, neutering clinic, soft tissue and orthopaedic surgery, small animal dentistry, sampling and laboratory testing
Sister practices	We also work very closely with our two sister practices. This close working relationship allows us to provide you and your companions with unrivalled veterinary care.

5.2 The day

I arrived early for my day with Malcolm Sinclair at his practice in a village in Northern England. This was fortunate because it took me almost twenty minutes to find it. It was not as I expected in the centre of the village but almost a mile outside down a country lane. I drove past it twice because despite the sign stating Larkrise veterinary centre my brain did not acknowledge it immediately because of the nature of the buildings. They appeared to be very official and secretive almost military I thought. As it transpired I was correct, for what is now a veterinary centre was once a government office next to a nuclear bunker.

Malcolm pulled into the car park a minute after I arrived and got out of his car to greet me. His first words were "Oh I feel underdressed". I cringed with embarrassment. The reason being that I was the very image of Siegfried Farnon the senior partner in the television programme 'All creature great and small' based upon the books by James Herriot. Tweed jacket, checked shirt, yellow waistcoat, Barbour moleskins complemented by a Newcastle University school of agriculture tie and a red and white polka dot hanky. In contrast Malcolm was wearing a fleece, polo shirt and serviceable trousers, as I discovered later, did all the other vets in the practice.

Malcolm introduced me to the practice team who were all busy preparing to go out on calls. I watched and listened with interest how they planned their day. Who to visit first based on a triage system, distance and length of time expected on the job. Also how junior vets asked Malcolm and the other partners for advice on certain clients as well as animals. "Be careful with XXX" I heard one of the partners say "After what happened at the weekend he is still spitting blood", I was intrigued and Malcolm explained. On the previous Saturday morning the mother of a farm client had brought her dog in for treatment. She had sat down in the waiting area which is partitioned from the open plan office of the practice and overheard a conversation about her son and his reluctance to pay his veterinary bills on time and his attempts to get price reductions. Malcolm

explained that he and a partner had spent most of Saturday afternoon apologising and trying to appease him. He was a valuable client and had threatened to take his business to a new competing practice. On Monday morning an urgent practice meeting had been convened and a policy of never discussing a client inside the surgery was adopted.

One by one the various vets with calls to make left the surgery each carrying an array of equipment and drugs. Malcolm was going through the day book and planning with a partner the weeks' schedule as well as making telephone calls to clients. I sat and was befriended by a small dog (owned by one of the juniors) who persistently dropped a tennis ball at my feet for me to kick and for him to chase. Eventually Malcolm got up and gave me a quick tour of the practice before we went out on calls. He explained how in 1995 the government sold the present office building next door to the bunker. Larkrise bought the two storey office block and adjoining land which has been converted into a large animal hospital. He explained that they had recently (2008) created a small animal clinic and hospital within the building due to demands from their farm clients who wanted them to care for their pets. Malcolm explained that this was a business decision. Initially the Larkrise group was separated into two sites one for pets in Preston and this site for large animals. However, a new rival practice had been established offering small animal services locally so Larkrise was forced to follow suit. Malcolm explained that as neither he nor his partners were small animal vets they took the decision to employ a vet for this purpose. At the time of the visit (March 2009) this aspect of the business was not in profit and was being heavily subsidised by the farm work. Malcolm however, said it was essential because without it he feared he would lose farm clients and thus the major source of his income. We went quickly round the large animal treatment and hospital area. This was about half the size of a football pitch. An area was dedicated to hospitalisation and recuperation with a number of stalls. The rest was given over to operating theatres and treatment rooms. Ongoing building work was being carried out and this included overhead radiography equipment. I was not expecting such a set up. To me this resembled a small district hospital rather than a rural veterinary surgery. I was interested in some of the anaesthetic equipment used in large animal surgery, in particular an endotracheal (ET) tube used to maintain an airway during anaesthesia / surgery. It was

exactly the same as a human one except for the scale. Whereas an adult human ET tube is about a foot long this one used for horses and cattle was a metre in length. I asked Malcolm how he managed to insert it "Oh its second nature but I couldn't do it on a human… It would make your eyes water". With this Malcolm said "right lets hit the road" and off we went to his first call.

We climbed into Malcolm's car - a 4x4 diesel Mercedes - that was filled to gunwales with veterinary equipment and drugs for the day's calls. It struck me as being the ideal vehicle for a country vet, practical with status and it was not lost on me that such a car is expensive. Our first visit of the day was to Malcolm's sister's farm.

His sister's farm

We drove briskly from the practice, joined the M6 motorway, and within ten minutes we were driving up a country lane towards the farm. The landscape was rather flat and uninspiring and given that it was early March it was cold and grey. Trying to think of something to say I remarked that the landscape was similar to that of East Yorkshire but that there were more hedgerows and trees here. "Oh really?" said Malcolm without interest. Malcolm explained that this visit was more social than professional and he was simply taking some drugs for one of his sister's horses and as this day was not busy he was using it to do some catching up on family matters. We arrived at the farm house and we entered by the back door into the kitchen. It was large, functional, spotlessly clean and above all cold. His sister and brother in law were sat round the table and greeted both Malcolm and myself with a relaxed and friendly "come on in", Malcolm introduced me as Justin Armstrong from Newcastle University who is doing some important research on vets. They took this in their stride as if "important" researchers were a common occurrence and simply smiled and offered me a seat. Although it was now nine o' clock they had been up as farmers do since the early hours and were now sitting down to 'elevenses' I was offered and accepted coffee and toast which I consumed with relish.

As one may expect the conversation was familiar and relaxed. Malcolm and his family discussed snippets of family news and affairs and in particular how one of the family had suffered a leg injury during a rugby match and what Malcolm's son intended to do for a career. It was apparent that he did not want to become a vet or a farmer but was considering the Army. Malcolm supported him on this and said that that was his second choice had he not got into veterinary school. It struck me then that Malcolm would have probably enjoyed an Army career and with his confident outgoing personality and his physical size and athleticism he looked the very inch an Army officer. Gradually the conversation switched to farming and how an Aberdeenshire farmer they knew of had made a "mint" by selling up and buying land in Lithuania and was, by now, a millionaire. The conversation continued in this vein about farming and prices and so on I asked if they would consider selling up. In chorus the reply was "but what would we do then?" Not for the first time I realised that farming is more than a living but a way of life to many farmers. Finally Malcolm asked if they wanted him to have quick look at the horse. "No it's alright I will give you a call if she doesn't improve". I thought then how farmers had the knowledge and confidence in animal health matters not to over rely on the vet and also just how handy it must be having a brother as a vet. Suddenly, Malcolm leapt from his chair and said "Come on Justin work to be done", I said goodbye and thanked them for their hospitality and secretly welcomed the warmth of the car as by now I was so cold that my joints ached. The next call on the list was a pig and turkey farm about two miles away.

Pigs and Poultry

The next call was to check up on some young pigs with scour. On the way, Malcolm explained that this visit was not strictly necessary from a veterinary point of view as the farmer was quite capable of managing it but Malcolm said he would call in anyway to deliver some antibiotics. This he said was good business as although he would not charge the farmer a call out fee nor would he charge for delivery it helped cement relations with this client who in the last year alone had spent £40,000 in veterinary fees. It also gave Malcolm a chance to keep "his nose in" on the farm.

We drove into the fold yard and were greeted by the farmer, a chap of about sixty five dressed in blue overalls, wellies and a flat cap. Malcolm once again introduced me as Justin Armstrong doing important veterinary research. The farmer appeared to be impressed and wiped his hand on his thigh before shaking my hand with vigour. "It's very good to meet you, are you a professor then? You will be able to tell Malcolm and me thing or two I'll bet". I replied that I was not yet a professor but decided not to say that I was a mere trainee sociologist now that he thought I was a vet doing important research. Malcolm unloaded the box of antibiotics and handed them over. He then said "while we are here would you like me to have quick look? It would be good for Justin" "Oh please do" was the reply. We entered the first of a row of about 12 or so pig sheds. The young pigs became startled and ran to the end of the shed and grouped together. The shed was clean having just been swilled as the floor was wet, light and airy but to me very cold. Malcolm was invited by the farmer to examine some pig faeces that he had left by the door. Malcolm gave what appeared to be a casual visual examination and concurred it was scour but nothing more serious and said that the antibiotics would clear it up within the week. We repeated this throughout the remaining sheds that included farrowing sheds. Malcolm said it was important to look at every one to ensure there was no cross infection. He went on to discuss very matter of factly with the farmer how best to manage the scour. He did not lecture but simply reinforced what the farmer had said and knew already. The farmer asked me if I thought he was right. I smiled benevolently and said "Yes that sounds spot on to me". The farmer seemed pleased. However, as we were moving to another yard I witnessed a sight I found depressing. It was a wheelbarrow filled with straw and a number of dead piglets. How they died I did not know nor ask and although I did and do appreciate that the reality of the farm is that animals die it made me consult my conscience on the ethics of rearing animals for food. I hoped that my revulsion did not give me away and it apparently did not as the farmer seemed very interested in talking to me. He asked me if I was researching pig disease in particular. Now that I had by accident become a vet I did not want to disappoint but nor could I lie. So I said I was with the School of Agriculture at Newcastle where along with my colleagues we were doing a whole range of research on agriculture, farmers and vets. I

said that farmers were of interest to me because of their expertise and knowledge of animal health and welfare as well as the vet's knowledge. I added that farmers and vets were of great importance for food production and maintaining high levels of animal health and welfare. He seemed quite pleased with this and added "Some of the regulations can be a bugger to deal with and that's why it's good having Malcolm and fellows like yourself to lend a hand and advise". The conversation continued for a few minutes more and included the farmers recent holiday to Whitby and how impressed he was with Yorkshire and coming from a Lancastrian this was praise indeed. Malcolm looked at his watch and said it was time to press on his final words were "give me a call **any time** if things don't settle" With that we moved onto the next call. This was a commercial stables.

On the road to the commercial stables

On route Malcolm emphasised the need to maintain good will with his farm clients. He said that although there were over 300 farms and small holdings on the practice books only 75 were active and regular clients. He said that farmers were now so more knowledgeable and capable of looking after their stock and preventing problems from occurring the need for the vet for mundane jobs was far less than even twenty years ago. Also there is now more competition and with the invention of the internet and the affect of the Marsh Report which investigated vets monopoly on the supply of drugs, many farmers can simply order many veterinary drugs on line or from agricultural merchants. He said that this visit had cost him money because he had in effect given the farmer a discount but it was vital to keep good clients. I asked Malcolm his view on the Marsh report and suggested that vets are more than retail druggists who should be selling their professional services rather than drugs. Malcolm said that the sale of drugs was essential to a farm vet more so now because the increased expertise of farmers and that, although certain professional services could be lucrative, they were insufficient to maintain a cash flow. Malcolm was also concerned with the health and welfare implications of non vets supplying drugs. He told me of an incident where a local agricultural merchant had offered a supply of worm medicine for cattle in a raffle. The result was that the farmer

who won used this to treat a variety of ailments in his stock that he assumed to be due to worms with disastrous results to the animals' health and welfare. Malcolm's biggest concern was with the fact that licensed merchants and pharmacists can supply many animal medicines without any knowledge of animal physiology and the pharmo-kenetics and pharmo-dynamics of the drugs. Malcolm said something I had been told before by another farm vet on this issue that farmers have a tendency to overdose medicines in the belief that more is better. (I have since queried this statement with a couple of farmers who I have met and they refute this entirely). With this we had arrived at the stables.

The commercial stables

The stables provided stabling and care for horses owned by clients who could not stable them themselves. Malcolm had been called in by the staff to look at three horses under their care. I thought at the time this was an unusual vet client relationship in that a third party was involved in the consulting of the vet and the animal's owner would have little if any involvement. The first horse to be seen was a mare who had recently foaled and was recovering from laminitis. She was in a stable covered in deep shavings. Malcolm explained to me that this was to cushion her feet. He went on to explain the complexity of the horse's foot and why and how laminitis can occur. Often he said it follows pregnancy and foaling and is not always due to diet. For my benefit and perhaps the stable staff Malcolm explained the many causes of laminitis and its prevention; it was at times very technical. Malcolm asked the stable hand to walk the horse outside the stable and watched how she placed her feet. During this Malcolm explained what he was looking for, such as how the foot is placed in relation to others, the horses gait and so on. He physically examined her fetlocks and announced that she was doing very well and gave instructions for continuing care and instructed that the farrier be called for to re shoe her. The next patient was a mature and very big chestnut horse who needed dental treatment. Malcolm placed a device to keep the horses mouth open and made a visual and digital examination of his teeth. He asked if I would like to put my hand in to feel the overgrowth. It was quite an experience and, although the horse in question was very relaxed, I was jolly glad for the jaw brace. Malcolm then got to work on filing down the

overgrowth and again explained to me why this occurs. The dentistry was not particularly complex and certainly not delicate. It was very physically demanding and vigorous and once again I appreciated that, to be a large animal vet, you have to be fit and at times strong. I asked the stable hand if they ever used an equine dental technician. She replied not, saying that there were a number of them around but they could only do so much, so why use them when there is a qualified vet who can do everything. This was about to be proved with the next patient. A young filly needed her teeth filing down but she was nervous. Malcolm spent about five minutes just gently stroking her and talking gently. Eventually she allowed him to insert the jaw brace and Malcolm commenced the filing. Suddenly she reared up and it was only because of his reflexes that Malcolm avoided being kicked in the head. Unperturbed Malcolm soothed her down again and said "I will have one more go" after first asking the stable hand to help. He also instructed that I wait outside and closed the lower door of the stable. I am glad he did because as soon as he put his file in her mouth she let fly this time swinging round and kicking the stable door behind which I was standing with the most tremendous crash and bang. I nearly jumped out of my skin. Malcolm decided that the horse was too nervous to carry on without sedation. As he went to his car for the sedative I asked him what a technician would do in this situation. He replied that most would give up and refer to a vet but some would carry on regardless, putting the horse and themselves at risk. He also said it was possible for the owner to ask the vet to supply an oral sedative that they could give before the technicians visit but this would be obviously more expensive and time consuming. I suggested that technicians could be allowed to prescribe. Malcolm said it was possible but only after they had done sufficient training in veterinary medicine. Further to my suggestion of animal dental surgeons he replied "who would pay for this? Why should the public pay twice for a service that has very limited scope and demand?" Malcolm administered the sedative and after a minute or two he resumed the dental treatment. This time the filly was perfectly calm and relaxed and showed no signs of fear or distress. Privately I thought of the harm and damage that may have been done if it had been a technician and not a vet in attendance. During all this I was interested in the way the staff behaved and spoke with Malcolm. They were very relaxed and spoke to him by his first name. Yet at the same time they were respectful. As Malcolm gave his advice and

instructions they nodded in agreement and made mental notes. They never questioned his opinion but frequently asked for it. As we moved from stall to stall in a hushed group I likened it to a hospital ward round as the senior stable hand explained the patients problem or progress to Malcolm who then went on to make an examination. After giving some final instructions about the horses he had seen and making arrangements to see the horse with laminitis after the farrier had been we set off for the next call. Again this was to a stables, but one that was privately owned.

The private stables

The stables were situated behind a row of houses facing open fields. As we drove down the access lane I was surprised to be confronted by a policewoman who waved vigorously at Malcolm's car I thought there must have been some trouble. However, as it turned out the policewoman was the client who was waiting to go on duty later that day. She greeted Malcolm enthusiastically and shook my hand, Malcolm did not this time give the grand introduction: it was "this is Justin who is with me for the day is it ok for him to look around?" It appeared that Malcolm was concerned with or about something. We went into the stabling yard and I noted that the stables here appeared to be a lot cleaner and more comfortable than the commercial premises we had just visited. Once again the patient was in a stall with very deep shavings more like saw dust actually. By now I was something of an expert in horse doctoring and immediately diagnosed laminitis. I was wrong of course but the horse was lame and it was causing great concern and worry to both the client and to Malcolm. He was an enormous horse and at first I thought he must be a police horse.

As it transpired he was a dressage horse and not only a pet and companion but very talented and expensive. "When did he go off?" asked Malcolm. "Last night as I was bedding him down he didn't want to use his front left so I thought Id better move him in here overnight 'til you had seen him," replied the client. Malcolm said, "Good thinking. It's more comfortable in here and there's less chance he can damage it". Malcolm stood for a while and looked the horse over. He remained silent and I could tell he was in deep

thought. Eventually he said, “let’s try him out in the yard”. Even with my inexperienced eye could tell the horse was in pain as he was reluctant to move. Eventually with great care and soothing words of reassurance from Malcolm he was led out of the stall into the yard. He placed his left fore foot very gingerly on the ground and whinnied. Malcolm bent down and gently took hold of his lower leg. I was quite impressed with this as I would have expected the horse to struggle but, as Malcolm said, lifting his foot off the ground would bring relief. Malcolm examined his foot and lower leg with care and attention. After a time he said “it’s not inflamed and there’s no sign of infection do you think he may have knocked it?” The client said that he may have done but could not be certain. Malcolm carefully placed the foot down again and the horse whinnied again. Malcolm then explained to me that he had operated on him a week ago for a tendon injury and was surprised that he was still in pain as it was an unremarkable operation. “Let’s see him walk the drive” Malcolm announced. The horse was led up the long drive with Malcolm in front walking backwards watching his foot fall. Presently Malcolm said “I want to give him a shot of local that will determine whether it’s due to a knock or a nerve”. He administered the local anaesthetic and after a minute or two he walked the horses again this time he walked quite normally and even speeded up. “Hmm that pretty much confirms my suspicions” said Malcolm “What I have done is block the tibial nerve and look at him he is walking normally”. Malcolm explained that in his opinion the most likely cause for the horse’s lameness was the nerve ending touching tissue in the leg. Malcolm said he was very reluctant to operate again because it could simply make things worse. The client accepted this and asked what else could be done. Malcolm placed his hand on his chin and thought for a while “At this stage I think we should wait and see…give it another two days”.

Malcolm went on to explain why it was such a problem and demonstrated his knowledge of comparative medicine. He said such things happen to humans but it is not a major problem as often all that is required is for the limb to be raised for a few days and nature heals. In the horse, on the other hand, this is impossible: because they stand even when they are sleeping they would experience constant pain. I was impressed with Malcolm’s diagnosis and treatment plan as in my experience as a nurse it is the good surgeon who

waits and sees before going in with his knife. Also the fact that Malcolm did not have an immediate answer and was honest about his doubts demonstrated to me his competence rather than the reverse. After giving instructions on stabling and diet Malcolm said he would review in two days time. He then saw another horse who was this time experiencing gastritis. Malcolm added to my rapidly expanding knowledge of veterinary medicine and explained how and why horses get gastritis and even ulcers. "In the wild a horse will graze for up to twenty hours a day on low quality grasses and scrubland. So they constantly produce high level of hydrochloric acid and various enzymes so they can digest their food. When they are kept by humans we feed them once or twice a day with high quality foods that do not require much digestion hence they continue to produce acids which lead to gastritis and ulceration. He supplied a drug called gastro guard and gave advice and instructions on the horse's diet.

As we drove to the next call Malcolm said he was very concerned with the lame horse but did not want at this stage to worry the client. He said that almost certainly his dressage days were over but worse if he did not improve then euthanasia would probably be the only option. With this sombre thought we drove to the next call a dairy farm. During the short drive there I reflected on the last two visits and it occurred to me that whilst at the commercial stables Malcolm had acted very much in the role of hospital consultant. There was a degree of professional detachment from his patients. The stable staff were professional carers and the simile I use is nurses. These were third parties and as such did not have the degree of involvement with their 'patients' that the policewoman had with her horse. It was quite remote almost functional. Conversely at the private stables I thought Malcolm took on the role of the family GP who has a deep and longstanding knowledge of not only the patient but the family. Thus whereas at the commercial stables Malcolm gave clinical instructions and then moved on with the policewoman he was more contemplative, less technical, more involved with both his patient and client. What I am trying to say is that Malcolm had a bedside manner.

The deserted farm

There was nobody at home at the dairy farm other than a couple of inquisitive heifers milling about in the fold yard. I thought this was strange and the farm had an eerie *Marie Celeste* feel about the place. Malcolm said it was quite normal "after all farmers go shopping as well you know" "But what about thieves" I persisted "What about them? They are not likely to steal a cow are they?" I remained silent but privately thought if you lived in Middlesbrough Malcolm you would think differently. Malcolm showed me around parts of the farm, including the milking parlour. It was spotless and I asked when was the last time this was used. Malcolm looked surprised and "This morning of course why do you ask?" I muttered "Well its so clean I just thought…" "Of course its clean this is a milking parlour not a scrap yard". Malcolm opened a cupboard and put the case of drugs inside. I persisted on the risk of theft. Malcolm said "Its never happened yet" "Ah" I said "But what if the farmer claims they have been nicked and wont pay or conversely you said you had dropped them off but hadn't?" Malcolm gave me an old fashioned look and replied "Its all down to trust. The farmer must trust his vet completely and the vet must trust the farmer completely if we don't then we can't work together". With this admonishment ringing in my ears we went to the next call or should I say venue, the pharmaceutical lecture and luncheon.

A bit of a do: the pharmaceutical luncheon

"If we get move on we should just catch it" said Malcolm "I think you will enjoy it. It's about Blue Tongue sponsored by a pharmaceutical company and they always put on a bit of do". Presently we arrived at a small hotel on the outskirts of a local town and entered the conference room. I was looking forward to this lecture as my knowledge of Blue Tongue was pretty basic. However, as Malcolm and I slipped in the room, he walking purposefully up the aisle, it dawned on me that the lecture had finished and it was now at the point of the final address and show of appreciation. For the second time that day I cringed with embarrassment. Malcolm, however, was at ease and ushered me into a chair after first waving to a colleague in the audience. "Thank you ladies and gentlemen for attending in such high numbers today can we extend our appreciation to Dr Van Hooken"

(I forget her real name only that she was Dutch). There followed polite applause of which Malcolm joined in vigorously. I was still embarrassed but thought what the heck and joined in. As the audience broke away Malcolm joined a group of people who turned out to be farmers and vets. I listened to the conversation which had nothing to do with Blue Tongue but with everyday farmer / vet issues. Such as how so and so from xxxx had recently been kicked by a cow and was going to be out of action for at least a month. Another conversation was about how a vet had waited six months to recruit a suitable assistant only for her to leave after six weeks. Malcolm circulated around the room speaking to small knots of people and just generally networking. Shortly it was announced that luncheon was available. As we queued for the buffet, Malcolm caught the eye of the guest speaker and said "A very interesting talk". She replied thank you and invited Malcolm and I to sit with her. Malcolm and Dr Van Hooken began a conversation on a new instrument for the removal of gas from cow's stomachs and a new technique for detecting oestrus early on. As I could not contribute to the conversation I remained silent and smiled occasionally nodding my head in agreement when I thought proper. I think at one point Dr Van Hooken thought I was either mute or a bit simple so as I was by now starving I got stuck in to my cold collation. I had a feeling of déjà vu. Then it dawned on me. I remembered reading a James Herriot novel where James (Alf Wight) was invited to a lecture by a colleague only to arrive at the closing address. His colleague's real intention was to get a meal and do some networking. Presently with the meal eaten Malcolm thanked Dr Van Hooken again and said to me "Justin there are some people I would like you to meet".

These people turned out to be veterinary reps who where sponsoring the lecture. Malcolm spoke to them about various matters including costs and discounts for an agreed purchase contract. Listening in I realised that the conversation was more than drug prices but also about other veterinary practices around the county and the North. I asked one of the reps about his work and the area he covered. He explained that he covered with a colleague the North West of England and therefore he knew every vet in this area. He explained that although reps always maintain strict confidences with their clients they were often seen as sources of information on how things were going on around the country. He went

on to discuss various issues affecting the veterinary pharmaceutical world including the campaign for the Blue Tongue vaccine. He said it was not hard to convince the vets of the need of the vaccine but getting farmers convinced was another matter. I asked why "was it down to money"? He said no it was due to the time and effort needed to vaccinate a herd of cattle. He said that farmers were reluctant to spend days chasing cattle around when other work had to be done and they would only agree if the thought the risk of infection was imminent. This is why the lecture had been targeted at both vets and farmers. We talked for a while about animal medicines in general and how competitive the market was. An interesting comment was made that reps are one of the major sources of pharmaceutical information and development for vets. He said that previously he had worked in the human sector and that this was much harder because of the attitude of doctors. They are very arrogant and at times condescending he said and very strict with their time. Vets on the other hand are very welcoming and look on the rep as a valuable information resource. He said the average time spent with a GP is about ten minutes, whereas with a vet it is over an hour and this time is used to catch up on what's going on. As the conversation finished I noticed Malcolm speaking to a group of people. There was a lot of handshaking going on and as I approached I heard Malcolm say "So it will cut your drug bills down by ten percent at least and there will be no call out fee" It transpired Malcolm was negotiating a new type of contract with some of his clients in that, for an agreed annual or monthly retaining fee, Malcolm would guarantee a reduction in drug prices and not charge for farm visits. The farmers seemed very pleased with this proposition and after a few more words shook hands on the deal. Malcolm later explained to me that he had been working on this idea for a while as a means of maintaining his client base in the face of the new practice that was offering hefty discounts on drugs. He said that in his opinion they were losing money and were simply offering loss leaders to get a client base. He went on to explain that whilst most farmers were pretty loyal the fact remained that drug costs were a concern with them and some would be tempted to leave his practice as the savings were considerable. Gradually people started to leave as the event wound down. I noticed that everyone seemed to know each other and Malcolm especially. Malcolm was quite animated waving here and pointing there with comments like "I will see you tomorrow, let me know how things turn

out, I will ring at the weekend" and so on. We were the last in and the last out. The next port of call was the surgery.

Back at the surgery

Malcolm checked the day book and said "There's an interesting call come in while we were out: you might like this one, an old horse I have been treating for laminitis went down last night and wont budge" However, Malcolm said "I will see her at the end of today if that's ok with you because there are number of things I need to do here first". Malcolm spent some considerable time on the phone and the computer. A lot of the telephone conversations involved Malcolm negotiating contracts with farm clients. I used the time to have a look round the open plan office. There were several desks piled with documents and journals and it appeared that they were used for 'hot desking' as different vets would come in at intervals and use different desks. On the wall there was a flow chart of the practice's yearly performance. I noted that equine services accounted for around forty percent of the practices workload and that farm work had increased during the last year. There was a corner of the office given over to a small library, or should I say a number of book shelves. The books ranged from obstetrics in cattle to internal canine medicine. On the wall there was CPD literature and information divided into LA (large animal) SA (small animal) and Equine. I noted with curiosity that Equine was considered to be a speciality in its own right and did not fit into the two groups of farm / food animal or pet. I spoke to one of Malcolm's partners and a young vet who asked me what my research was about. "My word it sounds pretty complicated stuff I will look forward to reading it" he said politely. The young vet asked "You are not a vet then?" "No" I replied "I'm afraid not" "Hm" she said and walked off. Malcolm finished his business and said: "lets go into the back there's some interesting stuff going on"

We went into the hospital area where a group of vets were performing an X-ray on a horses head. The horse was in a large trap but appeared very calm and placid. He was taking a keen interest in the proceedings and kept shifting his head to look at people and what they were doing. I think this was making things awkward for the vets because I

could hear “No that’s no good he’s moved again”. I also noted that one young vet appeared to be uninterested in the job in hand and that she had the X-ray plate the wrong way round. Presently one of the partners came over and told me what was going on. The horse had developed a sinus infection that had not responded to antibiotics so they were trying to see if there was something going on, with the help of X-ray. The next case of interest was a young heifer calf with an umbilical hernia. She was in a stall with thick cow matting, looking rather forlorn and nervous. Malcolm asked would I like to examine the hernia. I did and with gentle pressure reduced it “well done, do you want a job”. Malcolm explained she was about to be operated on and the vets were in the process of preparing. Another partner came along and I asked what anaesthetic technique they would use. He told me that they would do a fast induction and maintenance under propofol (propofol is an anaesthetic given by injection rather than an inhaled volatile and whilst its main use is as an induction agent it can be used to maintain anaesthesia in short procedures) as they did not want to intubate and use a volatile as this procedure in cows is often risky. I went to see the vets who were “preparing” for surgery. I assumed that they would be getting scrubbed up and I was surprised to find them sat around a large text book on bovine surgery and reading up on how to do a hernioplasty. At the time this bothered me because I thought if a human surgeon had to read from a text book just minutes before the operation there would be an outcry. Later though I reflected that this was an example of the vets claim to do anything and that just because such procedures were not common enough to perform without reference this did not affect their expertise or their claim to perform any act of veterinary surgery. During this time two occurrences starkly informed me of the fundamental difference between human and animal medicine. First the surgery for the young calf was for purely financial and business reasons. She was a dairy cow and as such would produce milk thus the time and expense of the operation was worth it. I asked Malcolm would a bull calf be treated? He looked at me quizzically “No what’s the point, a Holstein / Friesian bull calf is of no use they are no good for beef and because of our crazy rules it can not be used for veal”. I said good. The second occurrence was a few minutes later when I walked into the yard and saw a dead foal. She was just left ‘dumped’ in a corner with her eyes still open and with her legs positioned as if running, a grotesque parody of life. I asked Malcolm why she had not

been covered up. Again he gave me a searching quizzical look and asked "Why… it's dead it's going to the incinerator later on". I reflected that there was no room for sentiment in veterinary medicine at least not in the large animal sector. Malcolm brought me out of my brown study and said "Right lets be off we have a couple more calls to make this afternoon".

On route to the second pig farm

Driving to this call I asked Malcolm his views on animal welfare. Malcolm became uncomfortable and said "What about welfare? It's not an issue". I persisted and said to many people it is, myself included. He replied that animals have a purpose and most of them are going to be eaten so it was not a concern if some died. I said I understood that but surely during their life they should be well looked after. Malcolm said "Where's the evidence to say they are not looked after?" I asked had he ever come across any farms that had poor welfare standards. He asked me how to define welfare standards. I quoted the five freedoms. He replied "No not really" We sat in an awkward silence for a while then Malcolm said "The RSPCA usually deals with any problems like that but they cannot afford to prosecute every case". I said that suggests that there is a widespread problem. Malcolm replied "I wouldn't know but often it's the public who make false complaints because they don't understand farming or animal behaviour". I asked him if he felt that the role of the vet was that of animal advocate or client advocate and what would he do in a situation where the animal's health and welfare were compromised. He replied that he never had to do this but went on to say that pet owners were the worst because they had unrealistic expectations. I asked him to elaborate and he quoted a recent case of a rabbit with a brain tumour and that it cost £2000 to operate. Malcolm thought this was decadent. He then mentioned a horse that had been given an artificial leg and said this was cruelty because the horse would never be able to run and this was an example of things going too far. Presently we pulled up to the farm and I think we were both glad to be able close the topic of conversation. Malcolm explained that this call was not to see any pigs but to attempt to sign the client up to his new farm retainer scheme.

On the pig farm

We were greeted by the farmer who like the first was dressed in blue overalls and cap. I was introduced as Justin Armstrong who is doing important… The farmer smiled and said "Hm sounds interesting". We were ushered into the house and encouraged to take off our boots. I then realised why Malcolm and all the other vets I had seen wore slip on Dealer boots as I spent several minutes unlacing my stout "country" boots. I remember thinking I hoped my socks match. We entered the house through the front door and despite the coldness of the day and that it was now late afternoon and the light was quickly fading I noticed that there was no heating or lights on. What little I saw of the house was that despite its size and rustic charm it was clean, cold and functional. We entered the office and the farmer switched on the light only for the bulb to go with a ping. "Oh" said the farmer and switched on a small desk lamp which illuminated the desk and nothing else. Malcolm gave the farmer a document describing his new idea for a retaining veterinary service provision. The farmer took out a pair of reading glasses and read very slowly the contents. Malcolm continued with his sales patter explaining how much money could be saved until he was gently hushed by the farmer who was absorbed in the text. I looked around the room, there were two desks one of which had a computer and fax machine, and both were stacked with papers and documents as were the notice boards on the walls. I noticed that there was an electric oil filled radiator in addition to the central heating and this wasn't switched on either. In the quickening gloom of the late afternoon I cast my gaze back to Malcolm and the farmer hunched around the desk. It reminded me of the portrait of the dice players by Georges de La Tour. Eventually the farmer seemed satisfied and agreed to the new proposal. Malcolm was visibly pleased and so was I because by now my feet were painful with cold and I had to refrain from stamping them on the floor. After exchanging a few pleasantries, Malcolm bade goodbye and we set off for the last call of the day.

The fallen horse: God heals we just send the bill

In the gathering dusk we drove quickly to our final call. I asked Malcolm more about his business plans. Malcolm explained that although his practice was doing well and was in the process of expansion he could not afford to be complacent. “There are a lot of corporate and franchise veterinary businesses out there and they are growing, they employ vets to do the veterinary work while they concentrate on the financial side. Most young vets, mine included, don’t want to be involved in the business side they just want to get on being a vet. So it’s tempting for many, they don’t have to worry about getting premises or equipment or paying staff”. I asked how this could affect him. “Well they can undercut me because they don’t carry the same overheads or they are shared throughout the group”. Malcolm went on to say that, at this stage in his career, he was more interested in business development as he found it exciting and challenging. And although he would always do clinical work he aimed to reduce this in favour of managing the practice in the future. I asked more about the next call. Malcolm said this was a bit worrying because he had been treating an elderly horse for laminitis who had made a full recovery only for her to go down the night before and not get up again. Malcolm dispelled the myth I held that horses only sleep standing up. He said “It’s normal for stabled horses to sleep laying down especially when they get older” He explained that in the wild horses are preyed upon so they tend to cat nap whilst standing but they only get restful sleep when laying down. However, he said “It is not common for them not to get up again and there are loads of reasons why not”

It was completely dark by the time we reached the remote house. However a blaze of light shone from a security light in the yard and from the open top half of the stable door. We were greeted by a young woman in her late twenties, a toddler of about two and a young and playful boarder collie. “Oh thanks for coming she hasn’t budged all day I’ve tried everything but she just can’t move” She said with obvious anxiety. “Lets take a look then and see what’s going on here” said Malcolm in a calm and matter of fact way. I noticed that Malcolm smiled gently as he said this and by the tone of his voice suggested that he dealt with fallen horses every day and this one posed no particular problem. It was

bitterly cold by now but as we entered the stable a wave of warmth engulfed us. I looked around the stable, it was clean, bright and warm, and shin deep in fresh straw which combined with the old horse produced a most pleasant bouquet. I watched and listened intently as Malcolm began his examination. First he took a detailed history from the client. As she spoke she alternately wrung her hands and stroked her hair. Malcolm asked what the horse had eaten in the past forty eight hours. "Just the stuff you said to give her she hasn't had any oats or anything. But today she hasn't touched anything". Malcolm digested this information and asked, "Is she drinking?" "Yes she's had a good drink and the water's fresh and bucket's clean". Malcolm said "Well that's promising" I noted a slight lift in the client's mood at this statement. Suddenly she said, "Could it be the smith? She was re-shoed yesterday but it wasn't Mr xxxx it was his apprentice I shouldn't have let him do it. I called in Mr xxxx this morning and he said it wasn't the shoes and the laminitis had cleared up but he couldn't get her up either". Malcolm said calmly "No don't worry on that score Mr xxxx is a first class farrier but I'll double check anyway" He examined her feet and felt for pedal pulses, signs of pain and tenderness and so on. "No it's definitely not the shoes or laminitis" he concluded. The client looked visibly relieved. I suspected that she may have been blaming herself for not insisting the farrier rather than his apprentice should shoe her horse. Malcolm then went on to make a full examination as best he could with the horse on her side. He looked at her eyes and pronounced that the sclera were clear so it was unlikely to be liver failure. He then examined her mouth and pharynx for obstruction and foreign bodies; he listened to her chest and felt around her body and limbs. Eventually he stood up and said "I just don't know. There's nothing to find, she's comfortable and relaxed but this is not normal". Malcolm withdrew to the car and came back with a bag and removed a syringe, hypodermic and a laboratory sample bottle. "I will do a blood test, that will tells us if there is anything going on in her blood chemistry." With honed expertise he took two blood samples from one syringe from the horses neck. He explained one was for a full blood count and the other for biochemistry. He went on to say. "At least this will rule out anything nasty" This last comment interested me because it was positive and hopeful. He could have said At least this will tell us if its anything nasty or some such and thus leaving the client with another night of anxiety wondering if the results would be

negative. Malcolm stood up again folded his arms across his chest and placed his left hand over his jaw and said:

> "I will be honest with you: I don't know what's going on here, she seems well in herself but there is something wrong and you were right to call me. But I don't want to make a snap diagnosis or do anything that could make her worse. I suggest I give her an antibiotic and something to make her comfortable during the night. And don't worry she will be alright overnight. Tomorrow we will have a better idea of what's going on and then we can sort it out".

The client let out a sigh of relief, Even though the horse was no better, Malcolm's frankness and professional manner had, I thought, reduced the burden of anxiety that the client was undoubtedly carrying and at least he had assured her that her horse what not going to die overnight. However what happened next almost made me jump up and shout "Hooray!".

Malcolm administered an antibiotic and a shot of vitamin B by injection and gently rubbed the injection site and spoke soothingly to the horse. Suddenly the horse snorted rolled onto her knees and stood up. She then urinated abundantly and walked over to a food bucket and began to eat. "Oh thank God and thank you Malcolm thank you" was the client's response. She then began to half laugh and half cry and clapped her hands together and shook them forward and backward. I said "Bloody Hell" and quickly apologised "Oh that's alright don't worry" the client said with beaming smile. The flood gates opened and she said "Oh it's such a relief such a relief I honestly thought that was it, she's so old now and can't do a great deal and I thought this must be her time". I made a feeble joke saying old age should be banned and none us should age by law. It got one of the best laughs I have ever had. However, I was aware that this was in response to the situation and I doubted I could make a living from it. The client hugged the horse around the neck and said "Oh you had me so worried then" Malcolm looked on impassively, I said "Well done", "I do my best" he said. After further reassurance from Malcolm and the promise that he would telephone the results by the late morning we climbed in the car

for the drive back to the surgery. I was eager to find out what had happened with the horse.

"What did you do there?" I asked "I have no idea" said Malcolm "Its pure fluke but it happens from time to time". I thought privately yes you are probably right it is a fluke but I have seen similar occurrences in my career as a nurse whereby it appears that it is the doctor or the nurse not any drugs or treatments that makes people recover even when it has appeared that they are dying. We arrived back at the surgery and despite the time the vets were still working. A partner said "I've just sent xxxx out to xxxx's place. He said its staggers – I bet he's been sat on his arse all day and only now does he call us". Malcolm said that that was him finished for the day and he was off home for a meal before attending a farmer's group meeting that evening. I thanked him for his hospitality and asked "You must get a lot of satisfaction in your job especially when there is a successful outcome like the horse we have just seen". Malcolm replied "God heals them, we just send the bill".

5.3 Reflections of the day

The long drive home to Middlesbrough gave me time to reflect on the day. It struck me that the work of a rural vet is more varied than I first thought. I don't mean that they see different species and conditions but the different role that the vet plays. For example Malcolm throughout the day varied between a pharmacist, a dentist, a surgeon, a GP, a public relations consultant, a social net worker, an entrepreneur and finally a physician healer. Through these roles, Malcolm played out differing types of expertise and authority (such as his superior expertise in horse dentistry over the technician and his authority to prescribe a sedative to a frightened horse). I was impressed by the way Malcolm was received by his colleagues and clients at the lecture. Malcolm had many people wishing to speak to him not simply for advice but perhaps to share his wisdom. He was welcomed on to the different farms and stables with genuine respect. It occurred to me that Malcolm and other rural vets are agents of social cohesion in the way that they not only help hold together their clients' livelihoods and lifestyles but also their

emotional wellbeing. At the final call Malcolm demonstrated all the aspects of Aesculapian authority most strikingly. He showed wisdom, morality and above all charisma.

Chapter 6

The biography of a veterinary specialist: the example of Archie Murdoch

A very special specialist?

Archie Murdoch is one of five RCVS registered and recognised specialists in sheep health and production. His rise to the position of specialist has been a long and at times difficult one andit remains a challenge. How he formed the role of specialist and how it is received by others is of interest, particularly so when one considers his area of speciality. In Archie's own opinion there is only room for about eight sheep health and production specialists in the UK despite the size of the national flock. Sheep farmers have some of the lowest incomes in agriculture, and sheep do not usually receive the same level of veterinary intervention as cattle or pigs - one wonders how he can make a living. But this is not the point as Archie has said specialisation is not about making money:

> "Vets seek specialist qualifications for a number of reasons probably the last of these is financial gain. Usually it's for intellectual satisfaction and for the sense of achievement that this recognition delivers coupled with a need for peer recognition to benchmark the service delivery. The practical and academic needs to satisfy the recognition of specialisms have to have a recognised commercial need but this is rarely the driver for those who wish to achieve this status".

Archie supplements his earnings as a specialist with locum work often in small animal medicine and it is because of this that some vets contest his claim to be a specialist. They judge that specialisation should be a sole means of earning a living and do not see it in the way that Archie does. Archie's function as a specialist takes him around the UK and Europe not only in the capacity as a veterinary second opinion but also as an educator, an advocate and an ambassador for veterinary specialisation as a concept as well as

promoting his own area of expertise. Archie's motivation is not financial reward but the esteem of his peers, clients and the government, as much of his time is devoted to veterinary politics and ethics within the profession and without. He has achieved much in this respect and is frequently consulted by the Government Veterinary Service for his opinions as well as from others especially in his role and function as an expert witness in animal /veterinary legal matters. Archie is also very much involved with animal welfare; he is a member and former chair of the Animal Welfare Science Ethics and Law Veterinary Association (AWSELVA). This organisation seeks to promote understanding and debate on topical animal welfare issues and provides advice on such matters to veterinary and agricultural schools, farmers and animal welfare organisations. Membership is inclusive and the association welcomes members from all backgrounds besides vets. This is important to Archie because as he said,

> "The welfare of animals is not and should not be the exclusive domain of the veterinary profession but as vets we can give expert advice and act as leaders to others"

The acknowledgement that non-veterinarians can and should have a role in the welfare and study of animals but be led and advised by vets is a very strong element of what makes up Archie's sense of being a vet is and should be. However, he is averse to non-vets crossing the line into what he considers the domain of the vet.

The making of a veterinary specialist

A veterinary dynasty

Archie was born into a veterinary family, a dynasty even, as both parents and a brother were vets practising in farm animal work in the South West of England. Archie's earliest recollections are of accompanying his father on his rounds and this established his liking for animals and the rural way of life and imprinted Archies' view on the

importance of the vet in the rural community. From the age of nine Archie decided on a veterinary career and it appears that he identified the vet's role as being one of advocate of animal welfare and educator. As Archie says,

> "I grew up with animals, my parents were both vets and I was exposed to veterinary medicine from a young age and I used to accompany my father almost as soon as I could walk. I enjoy working with animals and I've always enjoyed the country lifestyle and to me it seemed an occupation which is valuable to local communities and it involved working in the rural community and it gave you an opportunity to improve the welfare of animals and to educate people in the ways to deal with animals"

As well as being drawn to the care of animals, he has also a strong rural identity that has influenced his career and lifestyle choices. This is something he shares with his two brothers. One works for the Ministry of Agriculture in Australia where he is involved in environmental work; and the other is a vet in Gloucestershire. The rural identity [or his rural identity] also frames Archie's veterinary identity, which is that of a large animal vet. It was the changes in agriculture and the changing countryside that pushed Archie North to Yorkshire. Archie's brother who began in a mixed practice in Gloucestershire now operates only in the small animal sector and whilst he is apparently content to be a small animal vet, Archie was not. Archie's rural / veterinary identity is very much defined by farm animals. Archie explained how agricultural and rural social change led him North,

> "The shift in farming practices but it goes much further back. The practice my father had was very much a dairy practice and it was in an area known traditionally as the Milky Way, the A 4 corridor. Now the number of dairy farms in that area have decreased hugely so much more interest in arable, sheep and beef production. A huge increase in companion animals and I would include horses in that as well, so there are 12 practices providing veterinary services into the same geographical area whereas my father and his partner worked alone in the

1950s. Most of those practices are offering small animal only. So that's an indication of how large animal practices slowly decline"

Archie did not wish to be a small animal vet and therefore North Yorkshire which at this time [1970s] still had a strong rural and veterinary identity that Archie could recognise, acted as much as a pull as it did a push for him to move his young family. As Archie said of his reasons for moving North,

"I love the area geographically, the place that we live in has incredible services, a village school, doctor and post office, we have immediate access to the countryside and it's a very traditional area so our children have had open access and their freedom very much like when we were children, a thing I don't think they would have had if we had stayed in the area I was brought up in".

Educating Archie

Archie was educated privately as his parents did not consider the rural state education system to be adequate,

"Living in a rural area our parents decided to send us to the private system so to prep school, public school".

Although Archie said he was able and attentive he did not get the required A level grades needed for veterinary school.

"I was too young, at that age boys where at a distinct disadvantage because there are so many other things going on with hormones apart from academic work which I enjoyed but there's too much else going on in your life at that age and I still feel quite strongly that choices made at that age are very difficult for young people So I failed to get in [vet school] I failed the exams, and I got poor grades"

Archie instead went to North East London Polytechnic and read for a BSc in physiology and biochemistry followed by an M.Sc in farm animal physiology at Reading University. His initial failure to gain entry to veterinary school was cathartic, but he did not give up trying.

The graduate

> "Having applied all the time to get into vet school, once I achieved the masters they grudgingly admitted me into the RVC".

His academic education - a degree and a higher degree - set him aside from his fellow veterinary students, and Archie sees this as the beginning of his sense and identity as a specialist. He found veterinary education to be rote and lacking academically and intellectually,

> "It was quite good fun. I wouldn't say it was a university education in so far as during the masters it had been guided learning really and that's really the best type of training you can have. With any sort of veterinary, medicine, dentistry and even nursing the amount of material is so large that you are very much spoon fed, so you probably don't question things as much as you should. *But I* do question things so I did enjoy it, but I found parts of it repetitive and mundane. I also found having done 2 degrees already I was getting very tired of being a student"

Archie however, acknowledges that vets must be trained in the fundamentals of medicine and this may come at the cost of intellectual freedom and enquiry

> "The formal teaching was directed towards companion animals and equine because the surgical aspects with farm animals are very much more limited, from the point of husbandry and management the early years of the course turned to farm animals. I think there was a loading towards small animal because I think it equipped you for dealing with some of the problems you come across when dealing with large animal work from the point of view of clinical training that is, specifically you're looking at medicine and surgery, and if you look at other subjects like pathology, necessarily that embraces the full spectrum and its having a really good grounding in those sciences that allows you to apply it to become a good clinician. If you don't have a good grounding in the sciences its going to effect you perception of disease and disease processes. The extra mural was very important and it was important you got two vet practices where the vet would cooperate and you could assume some sort of role within the practice so you could do things under supervision. You got a lot of interesting experience that way"

However, Archie did not consider his veterinary training to prepare him for subsequent practice as much as his background as both a vets' son and his University education, and when asked if the theory at vet school translated into practice he answered,

> "I think my life prepared me for practice because I'd grown up in a practice environment so I was probably more prepared for it than a lot of students are. With the background I had I was finding it easier to apply what I was learning but without that background I would have found it a lot more difficult and some of my fellow students would have found some of those scenarios difficult to handle"

In at the deep end

Archie's past experience and difference to other veterinary students was beneficial to him when at last he graduated and took the first steps in professional veterinary practice. His

first post was as an assistant in a mixed practice in North Yorkshire. This was at a time when graduate vets were considered to be 'competent' practitioners by the RCVS and the vet schools. There was little support in the form of mentoring. Vets were to a great extent expected to get on with it, to learn on the job,

> "I joined a mixed practice in Masham, a lovely place to live and a really nice practice but unfortunately after I had been there two months the principal and the guy he was going to take into partnership fell out and we then ran it for about a year as a two man practice which meant an awful lot more work and I had to stand on my own two feet straight off which was very good for my learning experience. I don't think I did any harm to the animals I dealt with either and inevitably I learnt quite a lot in those early years about handling clients as much as handling animals. And when you call for help you get back up when you need it then you survive. So I didn't feel competent but I was developing my experience"

However, Archie was keen to learn,

> "I always read an awful lot so I continued to read and I kept up to date with changes that were going on, the BVA congress in those days was a source of professional development as well and I also had an extremely able principal who sat down occasionally and went through things with me"

The seeds of specialism: Difference, disillusionment and independence

Archie's next post was as an assistant in a practice in Barnard Castle. It was here that Archie cemented his rural identity with North Yorkshire but became disillusioned with general practice. With his sense of difference and desire for professional independence, the seeds of specialism were germinated,

"I moved to Barnard Castle, to a large practice, mainly agricultural, equine and small animal as well. I was there about 3 years but there was no prospect of getting a partnership there. At that time within 4-5 months everything changed after I'd left that place because they suddenly inherited a neighbouring practices large animal work so they were now a 12-14 man practice so there would have been possibilities there if I'd stayed. But we'd looked at the Dales for about a year to find a place to set up and we found this place and it allowed us to bring up our children in a community that we valued, so that's why we moved here. I'd got to the stage where I thought I might as well take charge of my own destiny, we'd looked around at other practices in and outside the area but I'd been disappointed at the terms people were offering and quite frankly distrustful of some of them. This was because people would say things at interview that just didn't quite hang with what you were seeing was happening in their practice, you know we'll offer you a full partnership in a year if we like you which means you'll work for a year and then we'll advertise again"

The route to specialisation

Archie's route to specialisation was neither quick nor straight; unhappy with the situation at Barnard Castle Archie took the plunge to set up in practice on his own account without a partner. He established an agricultural practice in a village in North Yorkshire in 1987 and it was here that his interest in specialisation slowly began to develop and become a reality. This is a very traditional farming area and he had to compete with established practices. To succeed involved hard work and a competitive edge. Changes in the RCVS attitude to 'specialists' were occurring. Indeed, they embraced the notion of specialist practitioners and introduced an RCVS recognised path to specialist status,

"At the time this was happening, all the changes at the Royal College were coming about to allow specialists to develop and I saw that the Sheep Veterinary Society had created a route to specialise and that was an area I liked and an

> opportunity I wanted to take. It was the same year we set up here that I first went down that route, took the exams which allowed me to go on and get the diploma and register as a specialist. It isn't that particularly easy doing that in a small practice, you need your wife and family behind it and you do need a burning interest".

The Sheep Veterinary Society put forward a training syllabus in sheep health and production that was above and beyond what was taught in veterinary schools. Candidates would be peer reviewed and examined before a diploma in competency was issued. The RCVS accepted this as sufficient evidence of competency in sheep health and allowed such diplomates to describe themselves as 'specialists'. However it must be noted that it was not until 1992 that a separate specialist register was created by the Royal College

Archie's choice of specialism was in part determined by the agriculture of the area which is dominated by sheep production. He was also influenced by other sheep 'specialists' notably within government. Also Archie was influenced by the work of Terry Bandy a vet who had done much to improve the management, health and welfare of sheep and Archie considers him as a leading light in sheep health for his era.

> "Sheep health and production was an area that had always interested me. I had read quite a bit and spoken to Terry Bandy who has just died who was probably one of the sheep specialists of his era and I also met a number of sheep specialists scattered around the country in the Agricultural Development and Advisory Service (ADAS) and I felt very much that specialisation and the services they were offering shouldn't be offered by a quasi-government agency, rather than on a practice base in a private capacity"

It is of interest that Archie acknowledges that the 'specialists' were in government at that time yet he complained that government should not be the provider of specialist

veterinary services rather it should be in the private sector of which Archie could be considered to be in the vanguard. In addition the level of government veterinary intervention was at this time declining and ADAS was privatised – and advice on livestock health was shifted to non-vets, thus adding impetus to Archie to offer specialist veterinary services in private practice,

> "Government services were getting wound down, the people who were making these decisions weren't clinicians and they had no knowledge of disease processes, they were basically nutritionists selling cheap feeding regimes to farmers and I felt well actually that was in my province because it was something that I advised on, and something I regularly assessed for farmers and I thought it should be part of a package of health management we were offering to them. So that's the route I took and applied to the Royal College to be recognised as a specialist, so I've been a specialist since 1992 when the specialist register was first established".

Archie began offering 'specialist' services during the late 1980s. It was not until 1992 that the RCVS created a specialist register and he was entered on it. The recognition from his professional and regulatory body for his specialist status was important to him. Official recognition adds gravitas to his claim of being a specialist and acts as a sort of final arbitrator where this claim may be contested. It protects him from legal challenges from other practitioners. He is proud that he has been in the vanguard of professional specialisation, first at the UK level and then at the European level. Currently, he describes himself in professional correspondence,

RCVS Recognised Specialist in Sheep Health and Production. Foundation Diplomate, European College of Small Ruminant Health Management.

The European validation and diploma is also of interest as it informs others that Archie is also recognised as specialist within Europe as well as the UK and that this is an advanced veterinary academic qualification above that of the average vet.

A Special Practice

During this period Archie merged his practice with another mixed practice in nearby Richmond and this it appears brought Archie to a crossroads in his career. The down turn in farm animal work and the subsequent buying out of a small practice in nearby Darlington allowed Archie to focus more on sheep medicine:

> "I think the recognition as a specialist is a considerable advance. To use it within practice is actually quite difficult to do flock health planning, to offer secondary referral, all takes you out of the practice and its quite a time consuming process and although you can be well remunerated for it, it isn't seen by your colleagues as compensating them for your time, all the effort they have to make to cover the rotas when you're not there. So in a practice that I owned and ran myself it wasn't a problem but when I merged the practice with a neighbouring practice partly due to the downturn in large animal work and partly due to the logistics of managing a wide ranging practice it was difficult. So when we bought out a practice in Darlington it allowed me to move out of the business side of the practice and focus more on specialism. I began writing for the local press formally and I became more involved in veterinary politics."

He began to spend more time on his specialist activities which included an advisory service to stock keepers and to a lesser extent other vets. Most of his specialist work however, appears to have been as an advisor for drug companies and being involved in veterinary politics via the BVA and writing for the local press. This caused problems with his business partners as more and more of Archie's time was taken up with these activities. A mixed rural practice is very demanding on the vets time and lifestyles.

Twenty four hour cover is essential to maintain goodwill and comply with the RCVS code of conduct, so vets must share this responsibility. Rotas are drawn up and a particular vet will be on duty or on call at an agreed time. It appears that Archie could not meet these requirements due to his specialist work and this lead to conflict. In 2005 things came to a head and Archie finally dissolved the partnership and established himself as a "Veterinary Consultant."

The Consultant Veterinarian

Arguably Archie draws a parallel between human and veterinary medicine by framing himself as a consultant in a specialist area of practice. Medical consultants are the most senior of specialists: not only are they considered to possess superior knowledge and expertise than say registrars they also have considerable authority. They are always and without exception the boss. Consultants are used by others as a source of specialist and specialised information, knowledge and expertise that lesser 'mortals' are not considered to possess. They are also considered to be educators and leaders who push forward the boundaries of knowledge and expertise, hence they are consulted upon. This is how Archie frames himself and the service he offers

> "I look on myself as being primarily a veterinary clinician however my main role is as an advisor to sheep farmers and the sheep industry and other veterinary surgeons. I may be delivering extension messages so changes in policy or medicine and therapeutic machines. I may be looking at the different effects of different drugs, pharmokinetics of drugs in farm animals, adverse reactions, things on a wider spectrum like welfare and I may be trying to assess that and those are the roles I am trying to develop. I have developed them across the farm animal species but my specialism is sheep health and production"

Archie is frequently consulted by drug companies for his specialist knowledge often when there has been an adverse reaction to a drug. Archie gave an example of his procedure and why he is trusted,

> "You review the husbandry on the farm, the procedures that have gone on, any post mortem advice, post mortem data or pharmokinetic data and then looking at it in the context of what was happening at the time, is there an adverse reaction because of the failure of a vaccine to work properly, if so have you any evidence of vaccines working, is it a drug that has failed in action or has it been poorly administered which could be the problem. The main responsibilities I have from a specialist status are that I'm seen to be totally independent, that I'm accurate and true in my findings and that I have the up-to-date knowledge and experience, and that I keep that current so that I'm of use to people".

In addition Archie holds a certificate in animal welfare science and law from the RCVS. This he regards as being proof that he has more specialised knowledge in the welfare of animals than other vets but is reluctant to take this further as it would not increase his expertise,

> "I also have a certificate in animal welfare science and law from the RCVS which is a two stage specialisation process. Whether I go on to take the diploma in that is very arguable. I'd have to spend an awful lot of time writing things up and I could be getting involved in things that are newer and more interesting and I don't see the need to go down that route again… it would be to get another set of letters really. It wouldn't improve my skill levels… it might make me more marketable in certain areas"

In this sense Archie acknowledges formal specialisation may improve his marketability because it extends it beyond sheep health and production to include specialist welfare but adding an extra qualification does not necessarily improve upon his existing knowledge. This suggests that there may be a limit to the value of formal and certifiable training.

Have stethoscope will travel

The nature of Archie's specialisation means that he is peripatetic thus he travels widely and there is no one day alike and only part of his work involves contact with animals much time is devoted to preparing advice and opinion. Also he sees himself as a trouble shooting consultant and expert,

> "I don't have typical days really which is one of the reasons I enjoy doing what I am doing. I can't give you a weekly outline because the last 4 weeks have all been different. They usually involve travelling somewhere, they usually involve some writing, some reading and research and some contact with animals. I do a variety of things… on-call work, an expert on a steering group for a research project, another expert on a steering group for a research project for a pharmaceutical company, they want me to develop a trial site for them, inaugural meeting for a welfare trust involving the suggestion of a book on welfare, back in court again and that's it, quite varied, and in between times I've had two reports to write and I've got a farm where I've got a project going on. So my days are not typical they are varied and it does change seasonally because I like to divide my time between those various aspects, because I really enjoy being able to talk to farming audiences on ways in which they can improve practice because I think that's an essential part of practice life and I very much see myself in a role that supports or drives those practitioners and because I'm an outsider in those situations they may listen to me more than the local practitioner"

Much of the referral and requests for Archie's expertise comes from organisations such as the RSPCA, drug companies and government agencies. Private vets (or at least local vets) are reluctant to turn to Archie for advice because,

> "other practitioners don't refer because they don't see that the specialist is any more qualified or better than they are…and to do so is an admission that they don't have the skill or knowledge to deal with the case presented".

However, Archie does get referral calls from private vets *outside* of North Yorkshire apparently they do not see him as a threat because he is not local,

> "I get referrals from outside North Yorkshire and they think because you are from outside the area, and you must know more than the local guy, because they know the local guy. But I would never knock traditional practices, I would say there might be ways that you can incorporate them, or ways you can improve, but not that it's nonsense"

When Archie says he would never knock traditional practices he means that it is not the done thing to criticise a fellow professional for either their clinical or business work at least not openly, but by being an outsider he believes he can offer objective advice to improve their practice. It may sound arrogant and condescending but specialists in any field do consider themselves to be a cut above the average and thus have some extra quality. However, it is not because the local vet is not trusted rather it is because the specialist is different, with a more skilful approach:

> "It's not about trusting them, it's because they're not hearing what they're saying. If I got up on a stand somewhere round here and started talking about biosecurity for example, nobody would want to know. But if you go 40-50 miles away and start talking about the importance of quarantine with new stock that is coming in then they'll probably listen to you, and say to the local guy why haven't you told us about this. I use a different form of words to what the local guys using and maybe because I've come from the outside, often at the invitation of the local person, they see me as having a degree of expertise"

One of the bigger challenges Archie faces as a specialist is getting enough work. This is partly due to the underdevelopment of veterinary specialisation, commercial factors and that vets appear to be very reluctant to refer for fear of losing face or custom. Fellow vets challenge Archie's claim to have better expertise and knowledges despite his qualifications,

> "You've got to perform… you're putting yourself out there… you're a specialist, but why [other vets ask], what's so special about you? Are you saying that you are better than I am? …Well you've got to be able to respond to that and I explain to people that I am not better than they are, but I have subjected myself to peer review, and I have had to provide evidence of the status that I have achieved and they could do that too if they wanted to, and you do that in a gentle way it's more accepted. Veterinary specialisation is totally under-developed… the reason it's under-developed because you only get the development of specialisation if there's a business opportunity following it or going with it. So I see the role of specialist in this country as quite limited because most practitioners are really able and knowledgeable people with those species that they work with but I think there is a role for specialists to cover the whole of the UK to offer support in those areas where some practitioners are not so able I see my role as providing help in establishing various practices, providing CPD and essential work, those things are really important to the profession, those things should be brought forward and developed by their specialist leaders. Like everyone else I struggle through and deal with it, I don't have any particular support networks or anything, it's very important you have your family behind you with these sorts of things"

It would appear that Archie sees his role (as the private specialist) becoming increasingly important to the profession and stock keepers now that there has been a shift from the government of the profession to the governance of the profession. In the absence of any formal professional support networks Archie relies heavily on his family as a support mechanism. This is worth exploring; veterinary specialists are not represented by a

professional group within the RCVS or BVA. This is not to say that special interest groups are not there such as the BVCA, the SVS and so on who represent the interests of vets working with cattle, sheep etc. It is that the bulk of the profession is reluctant to recognise vets who claim to be specialists and by doing so placing themselves above the so called GP. Also given that there are only 200 or so RCVS specialists of all types and only 5 sheep specialists in the UK it is little wonder that they could not offer any real professional support. Archie also works alone: he has no partner to share responsibilities with and he is something of an exception; he is a pioneer and this makes it very risky financially and professionally. He must be very proactive to get work in; unlike other vets he cannot wait for business to come to him. Work is varied but also ad hoc: it is difficult to plan ahead. By being a specialist, Archie must be seen and perceived to have better expertise and knowledges than other vets by his clients, thus if he makes an error of judgement then the criticism is so much greater and the risk to his reputation and credibility.

Competitors or colleagues

Given that veterinary specialisation is novel and underdeveloped it is of interest to explore how specialists view each other, for instance, as colleagues and fellow pioneers or as competitors for a niche and risky market. Although there are currently (in 2009) five RCVS accredited sheep specialists, Archie has little contact with them as he states they are not full-time specialists. Instead, Archie has a close professional relationship with Kelly Blakely who is not a vet but an agricultural scientist working as an independent sheep advisor and Archie sings her praises,

> "She is not only very good at her job but appreciates the delineation between clinical and non-clinical work and understands different levels of expertise and the profession rather well…..and she is a personal friend as well as a colleague who I have worked with on a number of occasions. I get on very well with her but I wouldn't regard her as a competitor"

Although Archie acknowledges her expertise in certain aspects such as sheep husbandry and management he points out that she knows her place and that she does not trespass into 'clinical work'. He does not see her as a competitor because she is not offering veterinary services. This is in contrast to Archie's view of para-professionals,

> "I support the use of technicians providing their use remains under veterinary control. One of the problems I do have with the slackening of the regulations is the situation where non-veterinarians can own practices, this may satisfy the business aspects but it does not satisfy the veterinary sensibilities. I think its quite dangerous from a veterinary point of view, this is probably a very similar argument that the medics had with the government on the establishment of the NHS so maybe it's a question of delineation, and maybe as a profession we need to be more certain about what is practice, what pressures you can be put under as a vet, for example, at the minute certain commercial businesses can sell certain veterinary medicines because there's a business opportunity for them, so they may do that based on profit, not based on use"

Archie raises ethical considerations here. He claims that non-vets would operate only on a profit basis which could be detrimental to the public and animal wellbeing. And his suggestion is that only vets have moral and ethical codes of practice that safeguard animal and human wellbeing. Yet despite this he admits to doing much the same,

> "I'm a consultant selling my services directly, I am very aware of that as a business because what I am is what I earn basically and if I don't earn it I can't do what I'm doing. I am meeting market demands I am not meeting the demands of the public. I am aware of the public but there is a niche in the veterinary environment for people with my skills and it is the case of establishing yourself in that niche"

It appears that Archie is happy for Kelly Blakely to practice as long as she knows her place and does not overstep the mark and in turn Archie acknowledges her expertise as a 'specialist' but is alarmed at the possibility of para-professionals taking on what is currently the domain of the vet for example Archie's opinion of lay TB testers,

> "I have problems with lay testing of TB, if they [technicians] go into areas of diagnosis because that is the province of the veterinary surgeon. It's quite a skilful job to do; I don't believe they can carry the process out properly. They could be trained but it doesn't mean they'll get it right and I don't think although the training is possible that they would be able to deliver it in the same way that vets can"

Archie suggests that technicians are not professionals and are simply tradesmen that shall have only a limited and strictly governed role in veterinary practice as he explains,

> "Veterinary medicine is vocation and a calling you become a vet for the reward of the job not the money it pays you because you are a professional…you provide a service to the community and through the treatment of animals you act as a leader that supports and keeps that community together…of course the community must trust you and they award you with this trust and leadership…vets are paid for their vocation whereas a tradesman is paid for a job"

Summary: The making of a specialist

Given Archie Murdoch's background it is not surprising that he chose to become a rural vet. He was born into a family of farm vets and some of his earliest recollections are of being with his father on his rounds. By all accounts he enjoyed a comfortable childhood in rural Gloucestershire which he refers to as the "milky way", so called because of the number of dairy farms. His rural veterinary identity was established during this period

and as he said, from the age of 8 or 9, all he wanted to be was a vet. His parents made a good enough living to have him privately educated but he did not achieve the A level grades necessary for admission into veterinary school. At this point other young people might have given up and settled for a different career but Archie was / is determined. He chose, as he said, a roundabout way of getting into vet school by taking degrees in subjects cogent to veterinary science. This was to have a profound effect on Archie's future career and mindset. He was eventually "grudgingly" admitted to the Royal Veterinary College (RVC): already he was viewed and sensed himself to be different to other veterinary students. He considered himself to be an academic who had completed two intellectually rigorous scientific degree courses were his powers of reasoning and analysis were stretched. At veterinary school though he claims students were "spoonfed"

Set apart from his peers at the RVC because of his academic background Archie's sense of identity as a specialist began to take shape. He saw much of the training to be mundane and rote. Students were not expected to ask questions but Archie did question things. He did not regard his veterinary training to be of particular help when he qualified rather he considered his previous life as a vet's son and his university career to be more beneficial when applying theory to practice.

When he qualified Archie cemented his rural identity by joining a mixed rural practice in North Yorkshire as an assistant. It was something of a challenge for him as within two months of him being there one the partners resigned leaving Archie and his boss to run the practice. This early exposure to responsibility and forced independence was good for him in terms of experience and confidence building: he had to stand on his own two feet and, although he admits that he didn't feel competent, he survived. His education came to his aid as a survival mechanism, what he lacked in experience he tried to make up for in reading veterinary literature and personal development through organisations such as the BVA. Through the BVA he developed his interest in veterinary politics and found an audience and sounding board for his views on veterinary issues. His sense of independence was further developed when he moved to a new much larger practice. However, he did not get on well with his colleagues and employers and now that he had a

young family to care for he decided it was time to take charge of his own destiny. He set up in practice on his own account as he says an 'agricultural vet providing general farm services'. It was here that the seeds of specialisation germinated, when in 1987 the RCVS began to recognise veterinary specialists. The Sheep Veterinary Society facilitated a route for sheep specialists and as this was an area of interest, Archie took the first steps to gain specialist status. Archie was concerned that specialist animal health services at that time were often provided by non-vets working for government and he believed that the private veterinary practitioner was best served to deliver such services. As it turned out the state controlled Agricultural Development and Advisory Service who did much specialist work including sheep health and production was being wound down providing Archie with the opportunity to provide similar services within the private sector. After gaining a diploma in sheep health and production Archie was eventually registered with the RCVS as a recognised specialist in 1992, when the RCVS specialist register was created. It is interesting to note that although Archie is opposed to non-vets being involved in what he considers the exclusive domain of veterinarians it was and is just such a person (Kelly Blakely) who acted as Archie's mentor. He greatly admires her and acknowledges her as a fellow sheep specialist. Yet his respect is qualified "*She appreciates the delineation between clinical and non-clinical work*". In addition because she is not a vet Archie regards her as a colleague and not a competitor.

Archie's independence was challenged when due to the decline in agriculture in the area he was compelled to merge his practice with another bigger practice. Although it provided the financial security for him to pursue his specialist career it caused problems and disagreements with his colleagues as more and more of his time was being devoted to specialist work at the expense of his other duties and practice commitments. Things came to a head and Archie had to make the decision to comply with his partners or to take a considerable risk and go it alone as a veterinary specialist. In his words he 'bit the bullet' and in 2005 set his stall out as a sheep health and production consultant. There was considerable risk to this venture, veterinary specialisation is still in it infancy at least in the private sector. Even in the companion animal sector where the majority of specialists operate there is limited financial scope, so to set up in sheep health - an area not

considered to be at all lucrative - took some gumption. The negative attitude of other vets at least locally who do not refer because of professional jealousy or fear of competition meant that Archie would have to express his identity (and his business) as a consultant in other ways. His practice is peripatetic, he travels widely and almost continuously, yet he performs very little hands on work with animals. Much of his expression as a specialist is in the form of advisor and educator. He is a 'multi-media' specialist because much of his work is conducted at a distance through the mediums of writing, reading and research and the internet and emails are much more a part of this and are integral to him performing as a specialist (see also Chapter 7, Section 7.5). He is involved in numerous research projects as a special and independent advisor and is frequently consulted by drug companies for his expert opinion. It is of particular interest that Archie's specialist credentials are not especially valued by local vets yet are sought after elsewhere. He explains this phenomenon that being an outsider he uses different words to the local guy and he is seen as being objective thus people listen. Also the fact that he has been invited by a vet from another area adds to his credibility and authority as an expert in his field. Distant expertise seems to be more valued than local expertise.

Archie Murdoch is different to other vets; he is not content with the status quo and enjoying the financial comfort and security of an ordinary private veterinary practice but prefers instead to champion the cause of specialisation with its potential risks to both his income and credibility. His childhood experiences determined his choice to be a vet and he was not put off by failing to get into vet school straight from secondary school. He was determined to be a vet however, and by gaining two degrees he eventually persuaded the RVC to admit him. His education singled him out from his fellow students and it is here that his sense of difference began and with it the origins of a veterinary specialist. He found working with others difficult as he wanted to pursue his own interests and this led to conflict with his colleagues making the choice to go it alone as a consultant almost inevitable. The essence that makes the veterinary specialist then is a sense of difference, independence and self belief and perhaps a sense of superiority and this also makes him a national figure.

Chapter 7

Veterinary Performance

7.1 Introduction

Chapters 5 and 6 provided an empirical narrative of the main concerns of this thesis, presented as case studies. This chapter and the one that follows it (chapters 7 and 8) are the main analysis chapters and draw on the empirical work from chapters 5 and 6 as well as interviews conducted with other vets (see Table 2.1). This chapter aims to extend the understanding of 'veterinary performances' by focusing upon the variety of veterinary roles encountered during the research. The veterinary performance means the ways in which veterinarians 'perform' in their various roles. This can mean a 'show' but also the routines, practices and skills of being a veterinary surgeon. The chapter is divided into three sections, the first begins by developing the notions of Aesculapian authority that were introduced in Chapter 3 and introduces the dramaturgical perspective (Goffman, 1959) in order to understand the expressions of expertise and authority observed in the range of veterinary performances. The second section moves on to the analysis and discussion of veterinary performances and draws upon the empirical findings before revisiting Aesculapian authority in the third and final section.

Originally this chapter draws together Goffman's dramaturgical perspective and Aesculapian authority. Aesculapian authority is useful to understand the unique power of healers but to answer the research questions fully – especially question two about the different expressions of expertise in different veterinary roles – it was necessary to develop a framework that allowed me to analyse expressions of power *and* the everyday routines and practices of being a vet in the large/farm animal sector. Goffman's notion of front and back stage is especially useful in analysing the ways in which vets express their expertise and authority in different settings on a day-to-day basis. The main argument of the chapter is that Aesculapian authority is more fluid than Rollin (2002, 2006) assumes

and has to be developed and maintained by the individual and the professional association. Only when analysing in detail the everyday veterinary performance in front and backstage settings is the fluidity of veterinary Aesculapian authority revealed.

7.2 Understanding veterinary performances

To investigate veterinary performances the chapter draws upon the notion of Aesculapian authority (Paterson, 1957; Siegler and Osmond, 1974; Johnson, 2003; Rollin, 2002, 2006) and Erving Goffman's dramaturgical perspective detailed in his 1959 book '*The presentation of self in everyday life'*. Using these notions the chapter offers fresh understandings of veterinary performances, veterinary expertise and authority. This section details the rationale for the analytical framework and begins with a summary of Aesculapian authority that was introduced in Chapter 3 before moving onto a discussion of how this relates to veterinarians. Finally, there is a discussion of how Goffman's dramaturgical perspective is useful for understanding the everyday routines and practices of vets.

7.2.1 Aesculapian authority

To recap from Chapter 3, the term Aesculapian authority was first coined in 1957 by the sociologist T.T.Paterson to understand the relationships between the authority and power held by physicians and how their patients accepted them. The definition of 'authority' that applies here is power derived from opinion, respect, or esteem; a claim to be believed or obeyed (Johnson, 2003). According to Siegler and Osmond (1974), Aesculapian authority is a uniquely powerful authority vested in those perceived as healers, so even kings, politicians and dictators submit to medical authority. Its provenance is historically traceable to the time when medicine was inseparable from magic and religion. Aesculapian authority allows the 'sick' to escape from the responsibilities of life but in return they must surrender their independence and autonomy. In effect they must transfer the ownership of their bodily and temporal functions, albeit temporarily, to the physician.

According to Paterson (1957), Aesculapian authority derives from a combination of sapiential, moral and charismatic authority.

Veterinary Aesculapian authority

The concept of Aesculapian authority has been applied by the philosopher Bernard E Rollin to veterinary medicine (1996, 2002, and 2006). Rather than seeing this having ancient roots in veterinary medicine, Rollin suggests it is a recent development aligned with the growth in companion animal medicine. Thus, he argues that:

> "as society moves away from an economic conception of companion animals to something closer to a notion of personhood, veterinarians serving that population are forced out of what we would call a *garage mechanic model* of treating animals, towards a *paediatrician model*" (Rollin, 2006: 84, original emphasis).

The shift in models implies a move regarding the animal as a material object to a sacred subject, equivalent to the human child. The paediatrician like the veterinarian almost always works through a third party – the parent (cf the animal's owner) – and the basis of trust is in part due to a transfer of guardianship over the patient to the physician or surgeon. To liken a veterinarian to a paediatrician is a morally charged claim with potential consequences.

Another important aspect of Aesculapian authority is the 'performative utterance' though this had not been discussed in relation to veterinary or human medicine until Rollin (2002). Deriving from the philosophy of language (Bourdieu, 1982), the performative utterance goes beyond descriptive language and instead refers to spoken words endowed with authority and power because of the social standing of the speaker. For example, the judge passing sentence, the umpire stating 'you are out', or the minister or registrar saying 'you are now man and wife'. As Rollin (2002:1145) argues:

> "The ability to create powerful performative utterances accrues naturally to those possessed of Aesculapian authority. A physician or veterinarian is required to declare one sick and thereby create the sick role, with all its attendant removal of responsibility for person or animal. A declaration from a public health veterinarian regarding foot-and-mouth disease, rabies, or bovine spongiform encephalopathy can effectively doom thousands of animals to death with no appeal".

Aesculapian authority confers the 'sick role' on animals (small and large) which absolves them of tasks and responsibilities and legitimises the veterinarian in subjecting the animal to invasive tests and treatments. Conferring the sick role on animals, unlike humans can be a death sentence. This is a dimension of Aesculapian authority – the death sentence – that is unique to vets and is noticeably swathed in euphemisms – putting to sleep etc. Rollin (2002:1144) argues that such actions "would be dismissed as torture" in the absence of Aesculapian authority but performed by the physician or veterinarian they are "meekly accepted by the most powerful in its presence".

Rollin does not adequately explain "meekly accepted" by whom. In other words, whom does the vet's Aesculapian authority influence? Is it the patient or the client? I would argue it can be both depending on the situation. When Malcolm Sinclair attended the fallen horse his authority was accepted by the client and the horse too. And in other instances I have observed that the very appearance of a vet on the scene can bring calm to a worried owner and an anxious animal. Vets seem aware of this phenomenon and apply their authority interchangeably depending on both the client and the patient and the situation.

This takes us to the physical, including non-verbal, interactions and settings of veterinary performance. Aesculapian authority is useful for understanding the unique power of those that 'heal' in an abstract way, but the approach through linguistic philosophy does not provide a framework for understanding the physical performance of veterinary expertise, including the face-to-face interactions, the examination and clinical procedures and the

physical setting, all of which constitute the veterinary performance. The next section argues that the dramaturgical perspective developed by Goffman is an appropriate notion for understanding these aspects of the veterinary performance.

7.2.2 Goffman's dramaturgical perspective

To establish a deeper, more nuanced understanding of veterinary performance the work of Erving Goffman is particularly illuminating (see Goffman, 1959, 1961, 1964, 1974, 1981). Between the 1950s and early 1980s, Goffman developed a series of concepts to understand face-to-face interactions and the way in which everyday physical settings are involved. Called the 'dramaturgical perspective', he uses a theatrical metaphor, and argues that everyday social interactions and identities are fluid and performed through roles to convey characteristics and intentions. Goffman (1959) also makes a distinction regarding the setting in which the performance takes place between front and back stages.

Frontstage is where the performance takes place with the audience present. In the veterinary performance this would refer to face-to-face encounters with both the human client and animal patients. According to Goffman (1959), the frontstage has two aspects – the *setting* and *personal front*. The setting is the scene that the performer needs – for veterinary performance, either the surgery (waiting and examination/consulting rooms) or the farm. Significantly, for the farm vet the frontstage setting of the farm is someone else's property; which, as will be argued later draws out the charismatic trait. In contrast, the small animal/pet vet can construct the architecture and geography of their 'theatre' and the client/animal comes to them. The personal front is the personal equipment needed to perform, that is instantly recognizable to the audience as associated with that role - this could mean for example, the veterinary equipment. However, Goffman (1959) explains further and suggests two aspects of personal front – *appearance* and *manners*. Appearance refers to social status, and manners refers to the way the performer conducts themselves. Here we could consider the relationship with Aesculapian authority and expertise as Miller (1995:1) suggests,

> "One of the things people need to do in their interactions with others is present themselves as an acceptable person: one who is entitled to certain kinds of consideration, who has certain kinds of expertise, who is morally relatively unblemished, and so on".

The backstage is a place for the performers from which the audience is excluded. In the backstage the performers may be part of a team. The team being other vets working in the practice and also the veterinary nurses and administrative staff. Backstage preparation can help present an effective 'front' (Miller, 1995). In the veterinary performance the backstage equates to the areas in the practice such as, the operating theatres, pharmacy, offices etc – the places where the veterinarians work behind the scenes with the animal that are not accessible (except when invited and this would only be in an exceptional scenario) to the owner/guardian. Goffman (1959) argues that 'secrets' are an important part of the backstage because there are many aspects of performance on which information is withheld from the audience.

According to Goffman (1959) there are different types of secrets. The *dark secrets*, which are facts about the team that they conceal because they are incompatible with the 'presentation of self' that the team wish to portray to the audience. The *strategic secrets* are the intentions and capacities of the team which it conceals from its audience to prevent them from adapting effectively to the state-of-affairs the team is trying to create. The possession of *inside secrets* marks someone as a member of the group, for example, the inside secrets of the veterinary performance that marks veterinarians as members of the profession. Strategic and dark secrets serve well as inside secrets. Each secret dimension - dark, strategic and inside - contributes to an understanding of the 'backstage' veterinary performance. The secrets contribute to the air of mystery surrounding the performance. Goffman (1959) refers to this as *mystification*, in other words, the techniques used by performers to keep the audience in awe. To ensure a sense of mystery, the performer must maintain social distance and regulate contact and this Goffman (1959) argues, leads to respect. Inside secrets and the 'mystification' of the backstage veterinary

performance are an important aspect of Aesculapian authority (especially sapiential and moral traits) and expertise as later sections in the chapter discuss.

7.3 Analysing the veterinary performance

This section draws together the empirical work within the analytical framework discussed in Section 7.2. It begins with empirical examples of the 'frontstage' veterinary performance and includes an analysis of face-to-face interactions and personal front before moving onto two detailed examples (drawn from Chapter 5) – the 'drama' of the fallen horse and the pharmaceutical luncheon. These two examples are chosen as they most clearly demonstrate the fluidity of Aesculapian authority in an everyday front stage performance. The section then moves on to a detailed analysis of the 'secrets' of the backstage veterinary performance. This includes sections on the abattoir, the use of textbooks to conduct surgery, inadvertently revealing secrets to the audience, the 'death pronouncement' and a 'backstage' insight into the everyday workings of a veterinary specialist using multi-media technologies to prepare and rehearse for his audience(s).

7.3.1 The 'frontstage' veterinary performances

The 'frontstage' veterinary performance refers to the face-to-face interactions between the vet, the animals, and their owner or guardian. The animals and owners/guardians are the audience and the vet the performer. Frontstage interactions take place in a variety of settings, for example, in the case of Malcolm Sinclair the settings included the examination/consulting rooms in the veterinary practice, the various farms and the horse stables. For large animal vets working in general practice, specialist practice (e.g. Archie Murdoch) or in Animal Health (e.g. Peter MacDonald when conducting farm visits) the frontstage performance is one which includes the animal and owner/guardian in a practice or farm setting. However, the notion of the 'frontstage' does not explain the veterinary performance in the Meat Hygiene Service (see Section 7.3.2).

The frontstage costume: identity, status and authority

The frontstage veterinary performance also involves the personal front i.e. the props and costumes needed to perform the role and appearance and manners. As the empirical work reveals, the personal front aspect of the veterinary performance is closely related to 'charismatic authority'. Charisma is important for any actor because it facilitates both authority and credibility; thus the audience can be convinced that the actor could be the person they portray. Vets also need charisma to convince their audiences that they have status and wisdom. For example, the way in which rural vets dress, the vehicle they drive, the equipment they use all contribute to their 'performance' and help establish their social status and identity. Malcolm Sinclair, for example, wore the garb of the countryman 'a fleece, polo shirt, cargo style trousers' (with pockets on the sides) and Dealer boots (slip-on style with reinforced toe caps) as, I discovered later, did all the other vets in the practice. In contrast, my appearance on the day shadowing Malcolm was inappropriate, inconvenient and embarrassing to myself (I was dressed as a vet from the time of James Herriot),

> "We were ushered into the house and encouraged to take off our boots. I then realised why Malcolm and all the other vets I had seen wore slip on Dealer boots as I spent several minutes unlacing my stout 'country' boots".

Dressing in this manner, clearly identifies the vet as working in the rural sector, and ready for business. The dress is practical but more than this it is a uniform or 'costume' because they all dress in a similar way. This contributes to the vets' expression of expertise in that they are dressed for the job yet the style is *relaxed* and *subtle*. The vets costume is informal and blends in with the work performed in the country. Here, contrasts can be made with the costumes/uniforms of other professions for instance the 'white coat' of the human doctor (see Blumhagen, 1979; Wear, 1998), or the robes worn by the clergy, are symbolic of their professional status and authority in the frontstage performance. The costume/uniform contributes to the social understanding of what it is to be a healer.

The costume/uniform of veterinarians is less obviously symbolic than the ritual robes of the clergy or the white coat of the doctor. The veterinary costume gives the impression of 'dressing down' but because of the *uniformity* of the veterinary costume across the profession, it is culturally significant. It may be a relaxed and subtle costume in comparison to the white coat or the clergy robes; nevertheless it clearly identifies them as a vet and not a farmer. Therefore, the costume contributes to their identity, status and authority. Furthermore, the vehicles they chose for their professional business make a similar statement, for example Malcolm Sinclair's 4x4 Mercedes was "practical with status". By appearing as a vet in the costume/uniform, driving the right sort of vehicle and carrying the 'tools of the trade' the frontstage performance is established. The vets are presenting themselves as acceptable people to be trusted and respected.

The 'drama' of the fallen horse

The drama of the fallen horse is an example of how Malcolm in the course of his work is as much an actor as he is a vet. He adopted the role of healer for the benefit of his audience the client. His role here was very different from his other roles during the day where he had played the role of engineer, of consultant surgeon and of showman. However, the role he played in the act of the fallen horse was the most dramatic. Further, Malcolm demonstrated every aspect of Aesculapian authority in his management of the horse and his client.

Malcolm's stage or theatre was the client's stable so he was absolutely frontstage. Thus, his every act and every 'utterance' was witnessed and judged by the audience. The scene had the makings of a tragedy with the fallen horse that was unable or unwilling to rise or eat. Its owner was frightened and anxious, perhaps because she was fearful of and resigned to the fact that he may prescribe death. Yet she placed her faith and unqualified trust in the special powers that only healers possess. The term healer is used deliberately because this is what Malcolm had become in this performance and this was expected of him, especially since neither the client herself nor the farrier had been able to 'heal' the

horse and make her walk again. Malcolm was no longer the mechanic or engineer or the family friend he had taken on the mantle of the 'doctor' who can, as no one else can, proclaim a person or animal either well or sick. In this situation he was 'Mr Sinclair the veterinary surgeon' called out for his knowledge and moral judgements to do the right thing. So his charismatic authority had less influence and instead he and the client relied more on his sapiential and moral authority.

Malcolm's sapiential authority was tested almost to its limit. Although the client had by necessity placed her faith and belief in Malcolm's superior knowledge above that of herself and the farrier, Malcolm made it clear that he did not know the cause of this animal's collapse. This honesty, however, further reinforced his moral authority in that he did not make false claims or proffer false hope; this was no 'snake oil'. Malcolm's performance as a healer was both tempered and strengthened by his admission that he was not omnipotent. Added to this was Malcolm's Charismatic authority. Not only did he look like a large animal vet in his costume but his physical appearance and features tell you immediately that he is a country veterinarian who has experience, knowledge and competence with large animals. Here it is worth describing Malcolm's appearance from my observations. He is very tall, about six foot two inches, a keen rugby player and has cauliflower ears and a bent nose. He looks physically powerful and short-tempered and is the last person you would pick a fight with. He has a commanding and tough appearance, very much like an army officer. This is important because he does not look like a private in the army but has the features of the officer class. His appearance and manner command respect and you can imagine that these traits are charismatic to gnarled, old farmers and the country elite alike. He also demonstrated effective 'clinical assistance', better known as a good bedside manner when examining the horse and listened to and gently reassured the client.

However, what is harder to explain is the sudden recovery of the horse. Malcolm did not administer any wonder drug or 'magic bullet'; he merely gave a vitamin and anti-biotic injection that would not have worked so quickly. It appeared that Malcolm had some special skill, power or even 'magic' that neither the client nor the farrier possessed. It is

quite likely that the horse would have got up eventually without Malcolm's attendance, as it recovered. What is inexplicable is that she chose to rise when she did. But this is to miss the point of the authority of the healer. This phenomenon (where a seemingly very ill patient recovers or gets better simply because of the physical presence of the doctor or nurse) is common in human medicine even though it remains unexplainable. It could be that humans believe the doctor will make them better and therefore through some psychosomatic reason they improve rather like the placebo effect, but can this be true of animals? Whatever the answer, Malcolm's Aesculapian authority was firmly reinforced by this instance.

How to upstage the leading actor and get away with it

> "So what makes a good vet? Confidence, authority, composure, nerve and above all a thick skin" (Barton, 2009)

The pharmaceutical lecture and luncheon was an example of 'frontstage' in that there was a performer (the speaker delivering the lecture on Blue Tongue) and an audience of local vets and farmers. Yet in some respects it could be regarded as 'backstage' because the audience were *invited* from a select group of professionals who were closely related to the farm sector. It was not open to the general public only to an audience of vets, reps and farmers. This reveals one of the ways in which the inside secrets of the farm veterinary sector spread across their professional network. This type of professional network (lectures and lunches) serves to increase knowledge and expertise on a given topic and provides the opportunity to spread experiences and negotiate business. For me as an observer, it was also the clearest demonstration of Malcolm's charismatic authority as I will explain.

Malcolm Sinclair arrived at the pharmaceutical lecture and luncheon just as the guest speaker was making her closing remarks. He walked purposely up to the very front and took a seat causing other members of the audience to move along. He showed no signs of embarrassment or contrition for arriving so late and even gave a cheery wave to a

colleague as he sat down. He awarded the speaker with a thunderous applause as she left the stage even though he had heard nothing of the lecture. As the audience broke up into small groups and made their way to the luncheon Malcolm amazed me further by approaching the speaker and complementing her on a very interesting lecture. With casual authority he suggested we sit down together and discuss some of the finer points.

This may be regarded as an act of bravado even arrogance yet the guest speaker seemed delighted to sit and speak with him. Later, Malcolm began to network amongst the various members of the audience (farmers, other vets and pharmaceutical representatives) all of whom appeared to be delighted and flattered that he should seek their company. Others still waved to him and called him over or sent their good wishes. The guest speaker, however, had been forgotten and was isolated in a corner of the room listening to what I assumed to be a farmer who was speaking rapidly and gesticulating widely. Malcolm continued the charm offensive and used the situation to negotiate business with his farm clients and with other vets. On leaving, Malcolm purposely sought out the guest speaker and shook her hand and once again congratulated her on her lecture and said what a pleasure it was for him to meet her.

Superficially it might be supposed that Malcolm was simply a 'chancer' taking the opportunity to have a free lunch and drum up more business. However, it is not as simple as that. Malcolm did indeed arrive late and negotiate a few deals but he also advertised his presence as a local vet with an interest in the local farming community. He was universally welcomed and it appeared that it was a privilege (for the guests) for him to attend and seek them out to talk to. This is perhaps the strongest manifestation of his charismatic authority and another 'mask' of his identity as a vet.

Respect, trust and the performative utterance

Most of the veterinary performances observed or discussed with vets during the fieldwork involved a third party and in most cases the owner was present with the animal(s), thus, the relevance of Rollin's (2002) paediatrician model for understanding the vet-animal-

owner relationship. The owner in these situations had chosen and bought the animal(s) and was responsible for their care. The exception to this is when on farms a 'guardian' is appointed such as a stock-keeper or at the commercial stables where the stable manager and stable hands are responsible for the day-to-day care of the horses in the absence of the owner. In all of these relationships, trust and respect are vital components. The visit to the commercial stable where Malcolm had been called out to three horses provided an interesting example of this, as my comments reveal,

> "During all this I was interested in the way the staff behaved and spoke with Malcolm. They were very relaxed and spoke to him by his first name yet at the same time they were respectful. As Malcolm gave his advice and instructions they nodded in agreement and made mental notes. They never questioned his opinion but frequently asked for it. As we moved from stall to stall in a hushed group I likened it to a hospital ward round as the senior stable hand explained the patients problem or progress to Malcolm who then went on to make an examination. After giving some final instructions about the horses he had seen and making arrangements to see the horse with laminitis after the farrier had been we set off for the next call".

In this situation, Malcolm's performance is like that of a hospital consultant conducting a ward round. Like the hospital consultant, his performative utterances declare the horses sick (or not) and create the sick role. Only because he is a member of the veterinary profession and has Aesculapian authority are his performative utterances sought and accepted. As Bourdieu (1982:8-9) argues,

> "the efficacy of the performative utterance presupposes a set of social relations, an institution, by virtue of which a particular individual, who is authorised to speak and recognised as such by others, is able to speak in a way that others will regard as acceptable in the circumstances".

7.3.2 Revealing the "Magicians code": 'Secrets' of the backstage veterinary performance

In other sectors such as the Meat Hygiene Service (e.g. Sally Forrester) the frontstage setting is an abattoir. The face-to face interaction involves the animal but not the owner/guardian and in the abattoir setting the animal is slaughtered. In this situation the performance is more akin to the 'backstage' and dark and strategic secrets serve as inside secrets which contribute to the 'mystification' of the abattoir and the performances within in it. The abattoir is a black box, the input is a living animal and the output a carcass and this is about all people want to know or see. They do not wish to have knowledge of what happens inside or even worse to witness it. Tovey (2003) writes of the 'invisibility of animals' in nature and society; the abattoir setting is arguably the most mysterious, secretive and uncomfortable (for humans and food animals) aspect of rendering the *invisibility of animals visible*. Perhaps this is one of the reasons that very few UK vet graduates apply for the MHS. As George Edwards, a professor of veterinary medicine at the Royal Veterinary College (RVC) said in an interview, "all the students understand that vets are part of the food industry and the reason for farm animals and that animals are slaughtered but none of them want to work in a slaughter house, they want to save animals lives not be party to their deaths". As Buller and Morris (2003:224) comment, with the exception of Ouédraogo and Le Neindre (1999) much of the academic interest in "the society/nature debate stops, rather inconveniently, at the farm gate". Unlike pets, food animals "remain somewhat removed if only as a necessary deceit or concealment in the face of inevitable slaughter and consumption" (Serpell, 1986 cited in Buller and Morris, 2003:224). Interestingly, in Peter Lovenheim's 2003 book 'Portrait of a burger as a young calf' he chronicles the life of two cows on a beef farm but never sets foot in the slaughterhouse (see Lovenheim, 2003). More recently, Wilkie (2010) conducted an ethnographic study of farmers, auction workers, vets and slaughterers to comment on the multifaceted, gendered and contradictory natures of human roles in animal food production. In a discussion with a newly qualified female vet, Wilkie (2010:153) found that although the slaughtering process was part of the curriculum she, "didn't like it at

all". Explaining why she did not like the slaughterhouse she revealed a combination of reasons,

> "I find it a very cold and gloomy atmosphere. People who worked there I found scary…..Well you walk in and they all stare at you – you know, they're all holding knives. I just don't feel happy in an abattoir at all. It just makes me uncomfortable……lots of beasts hanging upside down, blood everywhere, and everyone's sloshing around with….bloody boots on, yielding knives, chopping things up. It's just quite a distressing place with all this death around" (Wilkie, 2010:153).

In contrast, a senior vet student was impressed that it was humane and the procedure was competently carried out. Surprisingly though, the same student said that before the visit she "had never made the association between live animals and beef" (Wilkie, 2010:153). Despite being impressed, the student said she 'could not cope with their job' as,

> "I cope fine with going out and putting dogs to sleep, cats to sleep, shooting cows – casualty slaughters – but I could not do that day in day out. I think it would depress me too much….I'm a vet, and it's my job to try and keep as many animals alive as I can" (Wilkie, 2010:154).

A senior veterinary educator who I interviewed for this research commented that that many young vets do not want to work in slaughter houses as they see their role as healers not executioners.

Although the abattoir setting is 'mysterious' to outsiders it is the vet who is trusted to ensure that the rules and regulations are adhered to – here then we see an example of Aesculapian authority. The vet in the abattoir is entrusted to have the knowledge and morality to ensure the slaughter process is followed correctly and, with the aid of the supporting "actor" the meat hygiene technician, ensure the meat is safe and the animal is

humanely killed. In addition, because of his authority the vet in effect certifies the performance of the slaughter men.

The textbook surgeon

Discussions with and observations of vets revealed some of the secrets of the backstage veterinary performance. One such example was the use of textbooks to perform surgery. A senior vet currently working in Animal Health, told me of his early experiences as a recently qualified vet working as an assistant. On one occasion he was on night call and was presented with a dog with 'bloat' (a twisted bowel and stomach). This is a life threatening condition and requires surgery and it was something he had only been told about. Peter had never performed such a procedure. He had to decide whether to call his boss for help and advice. He decided not to because this would reveal inexperience to his boss and the client. Instead he went ahead with the surgery with the aid of a textbook. This option was open to him in the backstage setting of the 'operating room' where there would be no audience. Interestingly, the place where surgery is performed in human medicine is always referred as the operating *theatre,* a term which dates back to when surgery was considered to be a spectacle in front of an audience. In contrast, it was observed that most vets referred to this place as an *operating room* a place where, at times, they can conceal their relative experience.

Charles Devere related similar experiences of using textbooks in his early career and drew comparisons with today's newly qualified vets,

> "When I first qualified I had knowledge but I lacked practical experience and at some point you have to do it yourself and take responsibility. I was adequately trained to do most jobs but its more difficult now for new vets because agriculture has changed and there is less opportunity to get on a farm. There are fewer farms for a start and farmers these days are less likely to call the vet out for straightforward cases A lot of farms are big concerns with their own specialist stockmen who are extremely competent and they deal with most things. When

> they call the vet it's for something important and they don't usually want someone who is inexperienced. When I qualified it was mostly small family farms and the attitude was you can make mistakes without it being disastrous. The vet now has to be more competent… cattle has gone the way of pigs and poultry. There are now specialist cattle practices, so it's difficult for a new graduate to get knowledge and experience at an early stage in their career. With bigger units and better qualified people looking after them the problems you are called out for are complicated. When I graduated it would be a pretty straightforward job and the stockmen were usually less competent so you quickly gained experience. My wife's a vet in small animals and peoples expectations are now higher… *the days of doing an operation with a book in front of you have gone*……I can remember tackling all sorts of things in this way … but now if you aren't sufficiently competent you are asked how many procedures have you done and why didn't you refer?.

Charles explained that people nowadays are more likely to sue a vet if something goes wrong. This is due to people demanding greater veterinary expertise, the growth of solicitors involved in medical and veterinary negligence and a greater awareness of specialist vets,

> "From litigation … and societal reasons, people have greater expectations of vets and there are now greater referral networks"

Both Charles Devere and Peter MacDonald speak of their 'inexperience' in the early days of their careers. To them, there is a distinction between the knowledge acquired at university and the experience gained over time in practice. Veterinary expertise is developed over time and is more than 'knowledge' and the 'day one competencies' that all vets leave university with. To develop veterinary expertise requires exposure to a range of medical conditions and the confidence to perform. The newly qualified vet has, at some early point in their career, to take responsibility for their performance which means they have to get on with the job on their own without supervision or asking for

help and advice. Exposure to opportunities and confidence are important throughout the career of a vet, but perhaps more so in the early stages. However, several factors, as Charles Devere mentions, in the farm sector hinder the development of veterinary expertise. The first is the decline in the number of farms and farmers. The second is the increasingly knowledgeable farmers and stock-keepers which mean the vet is only called out in complicated and unusual cases which require experience. The third is the attitude towards mistakes and the fear of litigation. The fourth is that the farm vet has little scope to retreat backstage.

Interestingly, both Charles and Peter suggest the 'days of using a text book to perform surgery are long gone'. However, my day shadowing Malcolm Sinclair revealed that this is not necessarily correct. Back at the practice, I observed the backstage performance of Malcolm Sinclair and other practice members and was surprised to witness a young vet holding the x-ray plate the wrong way round when x-raying a horses head. A partner, perhaps observing my quizzical look (though perhaps not the reason for it) came over and explained to me what was going on. The following case was a young heifer calf with an umbilical hernia. The vets were preparing to operate, and to remind us of the extract from the earlier chapter,

> "I went to see the vets who were "preparing" for surgery. I assumed that they would be getting scrubbed up and I was surprised to find them *sat around a large text book on bovine surgery and reading up on how to do a hernioplasty*.

I added my thoughts on witnessing this,

> "At the time this bothered me because I thought if a human surgeon had to read from a text book just minutes before the operation there would be an outcry. Later though I reflected that this was an example of the vets claim to do anything and that just because such procedures were not common enough to perform without reference this did not affect their claim to perform any act of veterinary surgery" (Observations with Malcolm Sinclair).

In Goffman's (1959) terms, I was privy to the backstage performance and the inside secrets of the profession. The dark secret of using a text book to perform surgery is concealed from an audience because this would not be in keeping with their expert status, in other words, their presentation of self. Using the text book is also a strategic secret because the *intention* to use a text book is concealed from the audience. Instead the sick calf will (hopefully) emerge healed from the backstage and the veterinary secrets are intact and concealed within the profession. However, there were no restrictions placed on my role as an observer and commentator.

The problem when backstage secrets are inadvertently revealed to the audience

An interesting incident was revealed during the day shadowing Malcolm involving a scenario whereby the mother of a valuable client overheard the vets discussing her son's (the farmers) 'reluctance to pay his bills on time and his attempts to get price reductions'. The mother was in the 'frontstage' waiting area with her dog. The frontstage waiting area is adjacent to the open plan office and only a partition divides the two areas. The partition gave the vets and practice support staff the false impression that they were in the backstage and they performed as if the audience were absent by discussing their personal opinions of a client. In overhearing this conversation the 'personal front' in terms of the appearance and manners of the vets involved and the practice was damaged. The client and his mother were insulted and could have withdrawn from the practice and gone elsewhere. As he was a 'valuable client', Malcolm and another partner visited him to apologise in person, a case of 'damage limitation'. To make sure this did not happen again, an urgent practice meeting was held and the decision taken to 'never discuss a client inside the surgery'. In effect, the inside space was designated as 'frontstage' leaving the space outside the surgery (the stables, operating/treatment areas) as 'backstage'. By redefining the frontstage and backstage it is more likely that the veterinary secrets, which as we now know include their personal opinions of clients as well as techniques, are kept within the practice.

However, it is perhaps an understandable mistake for a practice in transition. For the traditional farm practice, the whole of the vet premises are typically backstage (the farm is the frontstage) but Sinclair's practice is developing into a small animal clinic too, where clients bring their animals to the premises (which therefore needs to accommodate back and frontstage areas within the same premises).

The 'death pronouncement' and veterinary Aesculapian authority

The difference between doctors' and vets' Aesculapian authority is that vets' can legally pronounce and perform death – euthanasia. Doctors may only confirm death they can not kill their patients. Vets have superior Aesculapian authority as death deciders. Doctors pronounce the sick and the healed. Vets do the same but their superior Aesculapian authority is that they pronounce death and perform death. The profession is licensed to euthanase and as mentioned before we have euphemisms to express this such as putting to sleep. The death pronouncement is more fundamental Aesculapian authority than the sick pronouncement because the vet can say that a worthwhile life has come to an end. Section 7.3.2 discusses how in abattoirs vets supervise the death machines that kill animals in the food chain. This is another example of their superior Aesculapian authority but a recent campaign (as of November 2010) challenges the vets authority in the slaughterhouse. The RSPCA, Animal AID and Compassion in World Farming have in November 2010 launched a campaign for mandatory CCTV in UK slaughter houses (RSPCA, 2010). This is because of undercover evidence clumsy, cruel and barbaric killing of animals in some slaughterhouses. They believe that only CCTV can prevent animal cruelty in certain abattoirs because veterinary authority is failing in its duty.) Although, the campaign is supported by the FSA, they cannot enforce the use of CCTV. This raises the issue of whether OVs in slaughterhouses can claim to have Aesculapian authority. It could be argued that they fail in their duty to ensure the humane death of an animal intended for food. More controversially it could be argued that they are not overseeing humane slaughter but are complicit with murder. There is a legal defence for this accusation. In law animals can be killed but they must be killed humanely thus this is lawful killing. However, if the killing is not humane then in law it is unlawful killing. In

law deliberate unlawful killing is defined as murder. Whatever the semantics it is clear that many food animals experience a bad death and vets in their role as healers swear to ensure a good death of animals in their charge fail to do this. They put at risk their Aesculapian authority if they act as executioners.

7.3.3 The multi-media vet: the farm and other stages, the example of Archie Murdoch

The farm vet's stage is difficult to place as it is a performance on someone else's land. Thus the farm vet is like a travelling showman or the travelling medicine man of the old Wild West who takes all of his theatre with him. What is even harder to understand is just where and what Archie Murdoch's stage is. Archie does not perform like the normal farm vet; he does not normally treat sick animals but advises on their health. He does not carry with him all the accoutrements and props of the travelling vet, yet he is still a performer so just where does he perform, where is his stage?

The preparation and rehearsal of Archie's performance as a specialist vet takes place back stage. This is his cottage which serves both as his family home and his office. It is very much Archie's dressing room. Archie is a multi media player. Rather like other actors he uses a variety of media to perform. Central to this is Archie's office or command post and it is a place only the privileged are invited to. It is a small cold room situated at the back of his home and is packed with the tools necessary for Archie's performances. These include computers, word processors, a telephone and masses of journals, books and papers. The walls are adorned with some of the accolades he has received. His first degrees and his veterinary degree are prominent. Also there are his specialist diplomas from the RCVS along with professional certificates of veterinary organisations from the UK and Europe. Alongside there are numerous framed letters of thanks from a host of individuals and groups celebrating his performances as a specialist vet. What is interesting and significant is that these accolades are not for public consumption or even his family. This is his private office and few people are invited in to it. From this very private space, however, Archie produces much of his public work. This

includes writing, to journals, newspapers, radio and television. In addition he writes to an array of institutions including veterinary, agricultural, pharmaceutical and academic both in the UK and abroad as well as to individuals. As I say Archie's performances are multi-media and are not restricted to a physical presence or act. Extracts from discussions with Archie reveal his various multi-media performances:

> "When I began to focus on specialism, I started to write formally for the local press and became more involved with veterinary politics"

> "My roles and responsibilities as a specialist are very varied. I look on myself as being primarily a veterinary clinician however, my main role is as an advisor to sheep farmers and the sheep industry and other veterinary surgeons. I may be delivering extension messages to change policy or medicine and therapeutic machines. I may be looking at the different effects of different drugs, the pharmokinetics of drugs in farm animals, adverse reactions, and things on a wider spectrum like welfare"

> "I don't have typical days really which is one of the reasons I enjoy what I am doing. A week or month may involve travelling somewhere, writing, reading, research and some contact with animals"

> "I do a variety of things….on-call work, an expert witness in court, as expert on a steering group for a research project for a pharmaceutical company, they want me to develop a trail site for them, inaugural meetings for a welfare trust involving the suggestion of a book on welfare, reports to write and I've got a farm where I've got a project going on".

Archie is a performer on paper and in cyber-space as much as he is in person. Other aspects of his role as a specialist vet though do take him onto different stages and these could be described as front stage performances. It is here that he performs in person rather than a voice or a word. And rather like when we imagine what a character in a

book or on radio looks like they turn out to look very different in the flesh so it is true of Archie. Whereas Malcolm Sinclair as I have said previously is the very image of the country vet, Archie Murdoch has the look of the academic. Physically he does not look like a country vet for he is some what "Rubenesque" with grey unkempt hair and a beard. This was pointed out by a dairy farmer's daughter who said she "could not imagine him running up and down fields chasing cattle let alone sheep". He simply did not look like a working vet. Image then is important not only for actors but for vets. After all both must look the part as well being able to perform the act. So how then does Archie convince his audience?

As I have stated, Aesculapian authority is not a given and it is differentiated. Vets must create, develop and maintain it. Malcolm Sinclair has created and developed a powerful charismatic authority and plays down or has not fully developed the sapiential aspect, except in certain situations like the case of the fallen horse. Archie on the other hand has created a very strong and powerful sapiential and moral authority by necessity for his role as a specialist. The reason that these aspects are necessary is because of the audiences Archie plays to. They are themselves specialist or niche audiences including members of his own profession, academia, lawyers, officials etc. Thus for Archie to be convincing as a specialist vet with superior wisdom he has had to gain, develop and maintain extra knowleges. These knowledges are not confined to sheep health but include veterinary ethics, science, welfare and law. Thus Archie is equipped to perform in many guises and on many stages and as I have previously said his expression as a specialist is multi-faceted. Continuing with the actor metaphor it could be said that whereas Malcolm and other farm vets may be viewed as established actors in a certain genre or even as characters in a long and successful series, Archie is rather like the star who makes a guest appearance. His performance adds to the enjoyment of the audience for that one episode without interrupting or spoiling the continuing saga of the series. For example if you can imagine the late Peter Ustinov (Archie has resemblance to him) appearing in an episode of Last of the Summer Wine he would bring to a it a new angle and dimension that aids the series and increases the audience figures without altering the fundamental ethos of the show. Thus when Archie is invited by other vets to give a lecture on sheep health or to

express an opinion on a flock his presence is not seen as upstaging the resident cast but as being complementary to them. As Archie said,

> "Many practitioners are suspicious of specialists; they don't want someone coming in when they've been doing it for thirty years. So the difficulty is getting other vets to see you as an aid and not a threat…Specialists can improve their practice not detract from it".

As I say Archie relies heavily on his sapiential and moral authority but this is not to say that he does not possess or require charismatic authority. Indeed using the guest star analogy Archie like Ustinov brings not only gravitas to the performance but also charisma. Archie's charisma is firmly rooted in his morality and ethics. He believes passionately that veterinary specialisation is essential to enhance both the professions status and the client's experience. This can only be achieved by the advancement of the vet's sapiential traits. This in itself however, does not easily translate into increased income for the profession or the vet. Indeed many of Archie's specialist performances are *Pro-bono,* which adds further to his moral authority.

Like Malcolm and other farm vets, Archie often performs on a stage that is the farmers land or building. But whereas Malcolm and other farm vets have had to blend in and become countrymen and be viewed as being familiar and "one of us" Archie must be the opposite. He must be different to the local vets. He is after all the guest star and thus he must bring with him some star quality that the regular cast do not possess. His performance is a one off so it must be good from the start to the finish it also must be memorable. Again I would argue that Archie depends more on his sapiential and moral authority as the driver for his performances and somewhat less on his charisma. He must, like the star performer, improve a perhaps mediocre line or scene with that star quality, a certain nuance, or a certain expression. With Archie it is his knowledge, his objectivity and the shorter relationship that he has with the client compared to the long-term vet. He must not, however, upstage the regular cast he can not be seen to be better than the local vets rather his performance lightens their role and performance.

Another front stage area of Archie's performance is at professional and academic venues. Although, as with Malcolm and the farm vets, these stages are not of Archie's construction or architecture they are in effect no different from the many theatres and playhouses that travelling actors perform in. In this I mean that they have certain essentialism about them in that there are certain characteristics that make them an institution when broken down to a certain level. For example, there are many differences between a university and the headquarters of a professional organisation but they both share common factors such as conference rooms and presentation rooms that are frequently open to invited speakers. They are also both used by people performing lectures or public speaking either from within the organisation and without. Although Archie must conform to certain conditions of behaviour and protocol he is not required to blend in too much indeed this would be counterproductive so he must be different and original from others.

This notion of being perceived to be original and different is also very important in another aspect of Archie's performance as a specialist. This is in the courts of law where he performs the role of expert witness. In addition to his originality he must demonstrate objectivity, superior knowledge and expertise and of course morality for him to be accepted as a credible and authoritative person. An English crown court is perhaps the closest thing to a real theatre with all the aspects of drama, tragedy and at times comedy being played to a general audience. It too has the accoutrements of the stage such as costumes, the leading player (perhaps the one in the dock) the director (the judge) and of course the main antagonists (the counsel for prosecution and defence). Add to this the myriad supporting cast and cameo players such as juniors, ushers, witnesses and the jury then you grand theatre. Archie's role is not as an advocate but as an expert for an advocate whether this be the prosecution or defence. And where the advocate can and indeed must be charismatic if he hopes to convince the jury Archie must remain utterly objective in his performance and utterances. I can see here a contradiction in that Archie is called upon by one side to give his expert testimony and thus Archie might be tempted to be partisan and give opinion that only supports his side of the case. To do this

however, or to be perceived as doing this would be detrimental to Archie's credibility and irrecoverably damage his moral authority and bring into question is sapiential authority. Therefore Archie must consult his conscience and answer only what he believes to be the truth for his evidence to have any value to the judge and jury. Archie explains how he overcomes this ethical dilemma.

> "It (his role as an expert vet) is defined for me by the instructions I receive but which have to be taken in conjunction with ethical and professional guidelines. The courts decide if I am an EXPERT all I can do is supply information about my work and qualifications and give my opinion and explain technical details to the court in simple language. This includes offering explanation to possible different interpretations of presented evidence".

Malcolm Sinclair and other vets can not afford to do this, they must be awarded the halo by all and to achieve this they must at times temper their morality and conscience to please the client. For example a client with dog that has vomited once or twice consults his vet. The vet understands that this condition will get better on its own and no treatment is required, but the client expects something to be done. Thus the vet prescribes a steroid injection and a course of antibiotics the result is the client is mollified but the dog has unnecessary treatment. The vet is regarded as a 'good fellow' by the client but at the cost of the vets morality and judgement. There are other more serious threats to the vets morality whereby in order to maintain a clients patronage the vet ignores or is even complicit with poor welfare. Archie however, can afford not to be patronised by clients and thus does not have to ingratiate himself but must stand aloof. And be objective

So far I have argued that Archie has constructed and developed the sapiential and moral traits of his Aesculapian authority to a greater degree than the charismatic trait. This is necessary for Archie to perform as a consultant specialist who is invited by many different audiences to express his objective opinion. Malcolm, however, has constructed the charismatic trait to a greater degree in order that he is accepted into the farming and

country society. This society is less critical of Malcolm's morality or indeed his knowledge what is more important is that he is seen as one of them.

7.4 Aesculapian authority revisited

Goffman's theories are useful in our understandings of Aesculapian authority. They allow us to apply a sociological perspective to it and help us develop it into more than a simple philosophical view. Understanding Aesculapian authority from a sociological perspective requires us to see it as a human invention rather than an essential truth. Therefore, it has to be developed and maintained. It is something that is performed and constructed continuously for it to be accepted, and at times it does not always work. Also it is differentiated, in that aspects of its core attributes are more useful to some vets than others in different situations and performances. The sociological perspective allows us to understand how vets have developed superior authority over animals than non-vets rather than relying on some 'mysterious' power.

Authority over animals

Drawing together the sets of arguments, it can be seen that vets have authority over animals in several ways. First, they have authority because they are human. This is common to all humans in that we dominate and at times subjugate non-human animals for our own utility. Animals are considered to be inferior beings in every respect. They are by many considered to be dumb and stupid. Even where an animal's intelligence is acknowledged it is still considered to be limited to a particular function that is useful to humans, for example, the sheep dog or police dog. Usually we [humans] claim the credit for this because we have trained them to be so. We rarely acknowledge that they might just have the necessary intelligence to be natural sheep or police dogs and that they allow us to train them. Where the innate intelligence of an animal is accepted it is usually associated with negative anthropomorphic notions, for example, the wily, crafty fox or the sly and cunning tiger. As Peter Dickens (1992, 1996a, 1996b) argues, much like industrial workers, food animal have been subject to mechanisation, rationalisation and

automation. Also, like humans, he argues, they are made to specialise as 'beef cattle', 'milk cattle', 'layers' or 'broilers'. In consequence, he continues, their skills and learned tacit knowledges are subjugated and marginalised in the interests of humans.

The second type of authority is legal rational authority (see Weber, 1964). Here vets are licensed by the state to provide veterinary health services. They possess unique legal powers and authority in the medical treatment of animals. These are defined as acts of veterinary surgery and separate the layman from the professional by who can lawfully do what and to whom.

The third form of authority is Aesculapian authority. This type is harder to explain and understand. If we accept Aesculapian authority to be a human construct, can we justify the claim that animals surrender their natural capacities (Dickens, 1992) in the presence of a uniquely powerful trinity of authority in the same way that humans do? To accept this is to suggest that animals are cognisant of human thought and notions. This is clearly anthropomorphic and is resonant of the time when animals could be considered to be familiars (see Ritvo, 1987). If however, we accept Aesculapian authority to be a universal truth independent of human thought, belief or opinion then perhaps it is possible that non-human animals can be influenced by the 'mysterious' powers held by those who are considered to have Aesculapian authority. This, I suppose, begs the questions: when is veterinary Aesculapian authority for the animal or the client? and where does it work and where it does not (assuming it is a construct)? Here I am thinking that there are "limits to authority".

Limits to authority

If Aesculapian authority is an invention it is constructed only for the human client who may perceive a particular vet to be knowledgeable, moral and at times charismatic. As I (or anyone else) do not and can not think like a non-human animal it is impossible to answer whether they can conceptualise notions of charisma and knowledge. I agree however, (at least in my own experience with dogs) that animals do prefer certain

people to others and decide who is the "top dog" for example with our dogs they all had different personalities and each and differently liked certain people over others. But again I do not know what a dog thinks about. Getting back to the question I think vets do and must apply their Aesculapian authority toward the client as they pay the bills yet I have witnessed many vets who have virtually ignored me and spoken to my dogs even explaining to them what he / she wanted to do and even asking if that would be ok. (This of course could be just down to me as I have been informed that I am something of a "heart sink client" that is the vet's heart sinks when I go in as I tend to fire off a battery of technical questions and ask for management plans and so on). Aesculapian authority is differentiated and fluid. Therefore there are situations and contexts where it does not work or at least certain traits don't work. For example when I have observed and spoken to vets about how their clients perceive them and what they want from them the sapiential and moral traits are valued largely in the care of pets. People (myself included) appear to want a "clever" and "good" vet, someone who can make things right and 'cares' about the animal. Of course the clever and caring vet could be just showmanship to encourage the client to pay the fee and convince them it was worth paying for.

In the farm sector, however, the sapiential and moral traits appear to be of less importance and it is the charismatic trait that carries more credibility. Vets can't really be seen to be sentimental about a cow or a sheep that is destined for the dinner table. Also, because stock keepers have themselves considerable knowleges of animal health they appear to be far less impressed with the 'clever' vet and instead prefer the "mud on boots" mentality. Farmers want someone who can do the job but without the frills so the farm vet needs to be charismatic – or, more accurately, his charisma needs to fit in with the farm situation. He needs to convince his audience that he understands farming and farmers as much as he understands animal health.

Aesculapian authority and the GP/specialist dynamic

Both vet GPs and specialists construct Aesculapian authority as part of their performances and again this is differentiated. The specialist must always be precise and

prepared. His stage, or should I say his performances, are virtually identical. For example, when Archie Murdoch performs he has a precise 'script' from which he does not depart. He performs on stages that differ only in their geography and performs to a strict timetable or act. He may have a fifteen or twenty minute slot to present and is allowed say five or ten minutes for questions. So he must be prepared and attempt to pre-empt the audience. Ad lib or improvisation would not be considered to be good. Similarly, the specialist surgeon performs virtually the same operation over and over and it is only the patient that is different. He will perform the same procedure and technique from initial incision to final closing up without variance. The vet GP, however, can and at times must improvise.

Likewise, the farm vet is more likely to differentiate his performances. Malcolm Sinclair is an example where he performs differently to different audiences at different places: At the pig farms his performances and authority was that of pharmacist and business advisor; at the commercial stable that of consultant horse doctor; at the private stables, the family friend. The most interesting performance was at the fallen horse. Here Malcolm could not simply rely on text book procedure as the horse did not or would not respond. Instead he improvised and it appeared to work. Malcolm's Aesculapian authority was fluid and pliable; he made it fit the job in hand by applying it both to the concerned client and the nervous horse. He relied on his sapiential authority with the client (he succeeded where the farrier failed) and, it seems his charisma with the horse.

It might be a question of control and ownership. For example, the specialist has more control over a given case. He owns the procedures needed for the job and the necessary knowledges he also controls his environment or stage. The GP though is often presented with cases and situations where what he possesses is not enough and the control or ownership is held by others, be it man or animal. An example here is that of a government vet, when working early on in his career as a farm GP was pressured by a very influential farmer to give a false diagnosis on a dead cow so he could claim on its insurance. He understood that if he refused the farmer would not let him back on the farm and that his boss would be angry for causing offence to an important client. On the other

hand by agreeing to do this his moral authority would be destroyed. Despite his appeals to the farmer, his sapiential and charismatic authority failed and his moral authority was resented. This was one of the reasons that he left private practice and joined Animal Health. He told me at Animal Health he had greater authority and farmers simply could not brow beat, black mail, or bully him into doing the 'wrong' thing. He told me that when he 'advises' a farmer that he has a welfare problem the farmer listens and acts. He has in effect regained the ownership and control of his moral authority. So again it appears that Aesculapian authority is differentiated and is place, time and situation specific. The farm vet relies on charisma, the pet vet on knowledge, and the government vet on law and morality.

Critical conclusion

Although I accept much of Rollin's understandings of veterinary Aesculapian authority I do not consider that he has thoroughly interrogated the concept. It appears that he has come across the notion when reading human medical philosophy and has attempted to apply it to vets simply because vets are similar to doctors in that they can make a claim to be healers. Even here though he finds it difficult to use Aesculapian authority when looking at the food animal vet or abattoir vet e.g. those vets who do not necessarily heal sick animals but may engineer animals and be participant in their deaths. Therefore he uses the analogy of the human paediatrician and parent model as the best way to explain the [pet] vets' authority. Once again I agree that this is a good simile.

Rollin is of course a philosopher not a sociologist and thus his argument is essentialist. He has stripped down the components and characteristics of what is assumed to be the essential identity of "healers". This intrinsic quality is taken as a given, an absolute that can not be invented nor altered and is common to all healers. In contrast, the analysis presented here portrays Aesculapian authority as something contingent, a human construct in both doctors and vets that has to be worked for. One size does not fit all. It has to be invented, developed and maintained by the individual and the professional association. It is also differentiated in that different aspects of it are used by some vets

more than others. For example, the charismatic trait is of more use and thus is developed further to a farm vet than a pet vet. I would say that Aesculapian authority or as I now state "Aesculapianism" is and has to be a bespoke outfit and despite superficial similarities in each individual is different.

Aesculapianism is differentiated in vets (and doctors) not just by their roles as say a farm vet and pet vet but by their performances as a vet in different situations. The situations offer different resources, contexts, geographies to construct Aesculapian authority. Further, the root of their Aesculapianism lies in the legal-rational authority that the state empowers them with. This is something of chicken and egg. For vets and doctors to obtain Aesculapian authority first they must convince the state that they are the most credible and authoritative people to be licensed to practice medicine. However, to convince the very same state that they are the most credible people they must have Aesculapian authority. The RCVS – a self-governing professional association approves and regulates training and education.

Vets thus exercise state-sanctioned authority, but the public does not simply accept the legitimacy of their authority because they are told to do so by the regulating state. Instead, Aesculapian authority underpins this legitimacy but it has to be worked at, and is indeed quite variable geographically and functionally. For example with Malcolm and other farm vets it is the charismatic trait that is considered of greater importance. The notion of "mud on boots" is still strong in the countryside; stock keepers place more value on experience than theoretical knowledge and they can claim that they too have knowledges of animal health. Thus Malcolm attempts to fit in with the country way of life, with his choice of clothing and transport for example but like the Wild West travelling medicine man he has to convince a sceptical audience that his medicine is better than theirs, and that his knowledges are superior. The pet vet however, depends more on his sapiential aspect to convince his audience that he is a credible performer. His audience tends to have far less understanding of animal health and also place different values on it. For example, I can not see a farmer paying £2000 or more to treat a cow (unless it was a rare pedigree) yet such a fee is acceptable to the pet owner who considers

his pet dog or even rabbit to be "beyond monetary value". In consequence the pet vet must also develop and 'sell' his moral authority to the audience if he is to justify such large fees. The client must be able to feel that the vet is performing for the interests of the animal and that it is with great reluctance that a fee is charged. The fee must be seen as a means for the treatment to happen not a profit for the vet.

Although I agree with Rollin in many respects I think the problem is that his understanding of Aesculapianism is underdeveloped and is locked into a linguistic philosophy perspective. Further, when medicine is thought about it is framed in terms of healing, treatment, making better or effecting a cure. Vets do not always do this; some are animal engineers whose role is not to treat sick animals but make them economically productive. Rollin can not come to terms with this and simply characterises vets as healers. This allows him to apply his notion of Aesculapianism. I view Aesculapianism as having certain powers and authority that are denied most people. I accept the three core traits but I believe that these can be applied to other professional groups. Even vets whose role is not to treat sick animals but is to supervise their deaths do have some Aesculapian authority. Aesculapian authority is thus not a fixed given but a fluid and differentiated construct.

Chapter 8

Let sleeping vets lie: why vets contest the notion of specialisation

8.1 Introduction

Central to professional authority is expertise. Professions constitute and control fields of expertise, including what counts as specialised knowledge and skills. The regulation of expertise and specialisation lie at the core of professional authority. This chapter reviews how the vet profession handles these issues, drawing on the earlier case study materials in Chapters 5 and 6.

The idea of the specialist vet who decides to offer veterinary services in a specific area of practice - whether at species or systems level - is a contested notion amongst veterinarians. As mentioned in earlier chapters the overwhelming majority of UK registered vets are GPs with only a tiny fraction being recognised formally as specialists. As Chapter 3 pointed out in the past the RCVS itself did not allow vets to claim to be specialists as it was considered to be unprofessional and unethical - a form of self promotion. However, in 1992 the RCVS changed its policy and since then has allowed vets with the necessary qualifications to be entered on a specialist register but the uptake is both slow and low.

The vast majority of vets continue as GPs and eschew the concept of the specialist, even though many work in highly specialised areas of veterinary medicine, such as cattle health and production or poultry or pigs. Even within 'general practice', specialisation or a division of labour and skills is common place. For example, in a biggish mixed rural practice it is the norm for some vets to do the large animal work whilst others focus exclusively on small animals (pets). Yet each will claim to be able and reserve the right if they choose, to cover the other side. It is this that makes vets and specialisation so interesting - the fact that the generality of vets pride themselves on being able to treat a

range of species for a range of conditions. A rhetorical claim perhaps but as this chapter progresses it will be shown to be not without substance.

What then of the maverick: he who dares to make the claim of being a specialist with its suggestion that he has higher skills and knowledges than the GP in a given area of practice? There is divided opinion on the specialist and specialisation within the profession with many thinking that the wider development of formal specialisation in the profession would cause division and even job losses. An alternative viewpoint is that the specialist is a pathfinder with a singular voice who commentates on key veterinary issues and is an advisor and professional expert to audiences other than vets.

Using empirical evidence drawn from case materials in Chapters 5 and 6 as well as other interviews with vets, this chapter will discuss the issues set out above by examining the importance of general practice to vets and why many contest the idea of specialisation. Crucially, in exploring this, it challenges vets to say why they are not specialists (in a formal sense) and in doing so, it gets them to define and defend general practice. It will also suggest that vets may actually be better viewed as 'poly-specialists' rather than GPs. Furthermore, it will consider how this contradiction/tension between generalisation and specialisation could be resolved. Overall, this illuminates my central preoccupation with the authority of veterinary expertise.

8.2 Contesting the specialist

> "As vets we are trained as GPs and that means we can give intelligent judgements on a variety of species and a variety of conditions. There is no money in specialisation and it's divisive. How can they claim they know more than I do when we've all done the same training? There is only a very limited market for veterinary specialisation. Take equine for example, if you live near Newmarket you could make a good living but you couldn't do it around the country" (Malcolm Sinclair, Vet in Private Practice).

> "I don't consider myself a specialist, I am a general practitioner and if I wanted to move back into practice I could do a *two week refresher* at Bristol" University"(Sally Forrester, Meat Hygiene Services).
>
> "There aren't many 'specialists' about at least there aren't many who claim to be. Most vets would say that they are GPs. Whether the RCVS considers them to be specialists is another matter" (Barry Evans, Veterinary Laboratory Services).
>
> " I wasn't trained just for this [specialisation]… no vet is, we are all trained to do the same, there is no specialist training courses for vets as there are for doctors. Well I've done enough on the small animal side to do a caesarean on a bitch in an emergency but I'm not going to try and plate a jaw as XXX [his colleague] has just done today. Similarly, XXX could do a caesarean on a cow but he wouldn't want to talk about lameness or nutrition" (Alan Thompson, Vet in Mixed Private Practice who concentrates on farm animals).
>
> "Many practitioners are suspicious of you…[the specialist]. You don't want somebody coming in when you've been doing it for thirty years, thank you very much. The difficulty is getting them [other vets] to see you as an aid not a threat" (Archie Murdoch, Specialist Vet).

As these quotes illustrate vets or at least most vets regard themselves as GPs and consider the specialist to be at best an irrelevance and at worst divisive. Even Archie Murdoch, an accredited specialist, acknowledges that many GPs see him as being a threat. Yet all of the above vets could be considered to be 'specialists' in that they practice in quite defined areas. For example, Sally Forrester is a senior vet with the Meat Hygiene Service (MHS) and is preoccupied with public health issues; Alan Thompson is a partner in a mixed general practice but focuses exclusively on large [food animals]; and Malcolm Sinclair who is a strong advocate of the vet GP is a partner in a mixed practice but has a large equine caseload. However, all of them argue for the primacy of the GP. This is both at an ideological [professional] level as demonstrated by the comments from Sally who claims that she could if she **chose** do a two week refresher course at Bristol vet school to get her

back on speed for hands on clinical work. Clearly Sally is speaking as much for the veterinary profession as she is for herself. Alan, on the other hand, speaks more from the individual and practice level when he states that he could do a Caesarean on a bitch if he had, to but would not attempt to plate a cat's broken jaw. This he would refer to his partner. So even in general practice a degree of specialisation is established and acknowledged by GP vets yet they still hold onto rhetorical claims that they could - if they wanted to or had to - perform any act of veterinary medicine.

Another aspect of contestation over veterinary specialisation is that it is thought by some to be unworkable in practice. Malcolm stresses the point that there is not enough work to go around as a specialist, at least in equine medicine unless you are close to centres with a high horse population. Even Archie Murdoch acknowledges this as he has said that there is probably only enough room for up to eight sheep specialists in the UK despite the size of the national herd (there are currently 5 such specialists, RCVS, 2009) Even in the small animal sector where clients are seen to be willing to pay for specialist services such as orthopaedics and cardiology, there are only 22 RCVS registered orthopaedic surgeons and 12 cardiologists (RCVS, 2010).

However, what seems to be the greatest challenge to the concept of veterinary specialism is the perception that they [specialists] set themselves up to be 'better' than GPs. Look again at Malcolm's statement "How can they claim they know more than I do?" Malcolm, Sally and Alan all argue that they are trained as GPs and as such can make intelligent and informed judgements on any animal with any condition and that is something constitutive of being a vet. Alan states this " I wasn't trained just for this [specialisation]… no vet is, we are all trained to do the same, there is no specialist training courses for vets as there are for doctors". He therefore discounts the specialist courses for already qualified vets approved by the RCVS which Alan sees as essentially 'special interest' courses for vet GPs who would like to sharpen up their skills in a particular area of medicine. He contrasts this with doctors who are separated in their final year of formal education into a specialist pathway and generalist pathway. Although vets refer to themselves routinely as general practitioners, they are not necessarily emulating human medicine GPs.

Indeed the human GP is regarded by many vets to be a mere gatekeeper to specialist services and is thus considered to be deskilled. Contrast this with the veterinary GP who, in principle at least can be everything from surgeon to physician and anything in between. Monday morning could be wiring a cats jaw and Monday afternoon attending a cow with Staggers. Malcolm regards specialists as both divisive and unnecessary. Look when he says they can't be better than me a GP because we share a common training and experience. Sticking with the human medical comparison Sally defends her superior status as a vet GP by her unique training that enables her to be a Man Friday

> "As vets we are probably better trained than doctors simply because our training covers such a broad range of species and their different and similar physiology and biology. So I could make sound judgements on animals I have never come across because I know they have similarities with neighboring species. Take camilids for instance, I used to attend a llama farm, now llamas are of the same family as camels and as a rule what works for one works for the other they [the farmers] did not need to go to a **specialist** zoo vet for advice" (Sally Forrester, Meat Hygiene Service)

See how she claims that her knowledge of comparative medicine makes the concept of the veterinary specialist redundant? Barry Evans who works for the VLA had this to say about veterinary specialists,

> "There aren't many 'specialists' about. At least there aren't many who claim to be, most vets would say that they are GPs .Whether the RCVS considers them to be specialists is another matter"

> "In veterinary medicine specialisation is not as common as in human medicine because the demand is not there and very few vets can make a living out of it other than the universities and they are subsidised to an extent. My wife is a doctor and she is a specialist in paediatrics she has an enormous case load but I

> can't think that any vet could focus only on young animals and make any living out of it"

See how Barry states that most vets in the private sector are reluctant to claim specialist status and that even when the RCVS recognises them the broader profession does not necessarily do so. Further he supports Malcolm's argument that veterinary specialisation is unworkable in the private sector because of lack of demand. Despite this, Barry like Sally works in a highly specialised area (pathology) and when pushed by me to consider that he may have become a specialist, albeit by default, he replied,

> "Mnnn yes I would actually because I am essentially a pathologist although I deal with different species and I advise and inform other vets including DEFRA on issues such as Blue Tongue and so on"

Does this suggest that vets are happy to accept the notion of specialists but only in the confines of Universities and Government service? Is this because such specialists are not seen as a commercial or a professional threat to the private practitioner? Or is it an acknowledgement that there is both scope and need for veterinary specialisation but this is context specific? Specialisation is ok if it does not threaten the livelihoods of those in private practice. So long as it's kept within the corridors of government and the Universities it is accepted as a legitimate concept because neither government or academia compete with the private GP for business. Further, these institutions are seen as being neutral. The acknowledgement that these institutions do provide specialist expert advice and services that private practitioners cannot, casts doubt on earlier claims that all vets are equal in terms of competence and ability. There is a very conservative streak amongst vets who appear to be loathe to accept or confer the title of specialist on anyone in private practice. Even Barry who conceded that he worked in a highly specialised role ("I am essentially a pathologist") would not proclaim himself to be a specialist as this would be unprofessional.

8.3 The primacy of the GP

To understand the importance of being a GP to vets and why some are so antagonistic to the notion of the veterinary specialist, it is necessary to explore the different dimensions of the rhetorical claims that vets make about the GP / specialist divide. Some of these claims are at a professional level such as Sally Forrester and her claim to be able to re-enter clinical work after a two week refresher and others at a personal level such as Alan Thompson who states he could if he had to, fall back on his basic training to perform a cesarean on a bitch. Neither of these vets intends to do this and more than likely will never do so, but what is important is that they maintain the right and privilege to do so. This privilege is acquired / conferred on them because they consider themselves and are considered by others to be general veterinary practitioners and as such are entitled and in law expected to be able to treat any animal. Thus the idea of the veterinary specialist weakens their claim to be the 'all rounder' who, in Peter MacDonald's words, can "make a good stab at it".

Pride and Prejudice

Vets are proud of their claim to be able to tackle any condition in any animal. They consider themselves to be surgeons **and** physicians. They acknowledge that their training provides knowledge but little experience. Yet it is the fact that their training is so broad that it enables them to take broad responsibility for an animal's health and wellbeing without referring to others. Their reluctance to accept the idea of veterinary specialists is in part due to tradition; they have always been trained to be GPs and practiced as such. Although they acknowledge the human model of GP specialist medicine they refute it viewing it to be prejudicial to veterinary medicine because in part there is little scope but for a handful of specialists. Vets conversely regard themselves as being capable of every aspect of veterinary medicine. For a vet to set up as a 'specialist' outside of certain defined areas of practice such as equine medicine or in a University requires not only postgraduate knowledge but also peer recognition. Vets are reluctant to do this because at an ideological level they do not consider other vets to be any more skilled or

knowledgeable than themselves even though they acknowledge that colleagues may have more competency in certain areas such as small animal work they would not consider them to be formal specialists. Both can, if required, do the work of each other. Also one reason for not specialising is variety and being able to switch from one field of practice to another with only minimal (if any) refresher training. Vets consider themselves to be equals, the idea of the consultant vet would be considered to be divisive as it suggests that some vets are more equal than others.

All vets are equal but some are…..

Intrinsic to vets identity then is this notion that all vets are equal in the sense that they receive the same basic training and perform as GPs when qualified. At this point it is worth discussing what is meant by general practice in veterinary medicine. Although the term general practice and practitioner may be borrowed from human medicine this were the similarity ends. Vets have developed their own unique model of general practice that is comprehensive. The GP vet functions as surgeon, physician and anaesthetist. They can act as oncologist to the cancerous dog, surgeon to the fractured cat and obstetrician to the calving cow. GP vets then could be seen to be poly-specialists rather than GPs (in the human medicine model) and thus there is little need for the specialist and his services.

At this point it is worth explaining more of what I understand general practice and poly-specialism to mean. My understanding of the term general practitioner is a practitioner (of any art or craft) who has breadth of knowledge and expertise but not depth. As such, there are limitations to his practice as a doctor for example, he will have certain knowledges about renal medicine but would not have the deep knowledge and expertise to perform a kidney transplant, therefore, he must refer. The GP vet on the other hand is able not just to diagnose but to perform the operation and to administer the anaesthetic. This is an 'in-principle' claim – a part of the ideology of the profession – but in reality it is most unlikely that a farm vet would ever perform advanced surgery on a cat. Vets themselves acknowledge that although at a professional level all vets are deemed omnicompetent it does not mean that they are all equally competent in all professional

areas. This gap between the ideological level and the personal level is bridged for many vets at the practice level for example,

> "I'm not a small animal vet its not my area but I know the basics and I know how to treat mastitis and keep the dog comfortable until they take it to my small animal colleague at the surgery tomorrow" (Malcolm Sinclair when called upon to examine a farmer's dog who had developed mastitis after whelping whilst making a visit to examine cattle).

Here Malcolm despite being an ardent advocate of the vet GP model, acknowledged the idea of non-formal specialisation within a general practice by referring the dog to his small animal colleague (after making the dog comfortable) for 'specialist' opinion and treatment by his colleague. This is an important dimension to his (and other vets) model of general practice and how it is maintained. In reality vets cross refer within their practices to partners who have a range of experiential specialisms. See the example of Alan Thompson who claims that, at a push, he could do a caesarian on a bitch but would refer the cat with a fractured jaw to his partner. Alan relies on his day-one competencies, that is the minimal level of competence **all** newly qualified vets are considered to have: enough to do a C-section for example. He has no intention of ever doing so, in fact, because he has a partner who focuses his work on small animals. Malcolm however, explained to me that he does occasionally treat small animals to appease a client's request for example, to look at a farmer's dog whilst on a routine visit to the farm's animals. Malcolm obliged but within limits by making an examination and giving the dog a broad-spectrum anti-biotic that would temporarily alleviate discomfort but not effect a cure. For this he relied on his partner. The outcome was positive and a win-win for all concerned, the farmer received on the spot veterinary opinion, the dog received primary care and Malcolm maintained his image as a "vet for all seasons" without compromising his competency. This is an example of how Malcolm acknowledges and recognises the notion of experiential specialisation at the practice level that holds together the claim of veterinary general practice.

Regarding vets as poly-specialists rather than GPs whether this is at an individual, practice, or professional level remains counter to the claim at the professional level that all vets are the same in terms of the scope of their capabilities for veterinary practice. This claim serves to unify the profession by stating all vets are equal to one another in what they choose and are **expected** to perform. Thus Sally is entitled to provide any aspect of veterinary surgery even though she has been a public health administrator for many years. Even her admission that she would by now require some refresher training (no matter how short) is unnecessary at least under the rules of the RCVS or in terms of formal law.[4] As a registered veterinary surgeon she can perform any act of veterinary surgery so long as her name appears on the RCVS register. Of course this is largely rhetorical and in reality vets remain within broadly defined areas, but it is important to note that they **reserve** the right to move from one area to another without having to be retrained or examined.

The idea of specialist vets upsets this rhetorical claim because it suggests that vets are not all equal in terms of professional ability. For a few [the specialists] veterinary specialisation may bring honorific if not financial reward but at the expense of devaluing the status of the many [the GPs]. In so doing veterinary specialisation may threaten the veterinary profession's unity no matter how elastic and all encompassing this unity may be. Another reason for maintaining the *status quo* is perhaps more prosaic is that vets can move from one area to another with only minimal if any additional training. Vets have a strong ideology of 'experiential learning' – learning from experience, on the job and this is functional to them as small business people. Medics cannot move from one area of practice to another like vets. If a human GP wants to be a surgeon then he must train to be one beginning at the bottom as a junior, likewise the specialist. I once knew a consultant anesthetist who wanted to go into semi retirement as a locum GP, he was informed that he must retrain for three years to be eligible. Now if veterinary specialisation was to become more than a side show would the same situation occur? And how would that

[4] In English law a veterinary surgeon is defined as being a person whose name appears on the register of veterinary surgeons maintained by the RCVS and as such can perform any act of veterinary surgery as defined by the Veterinary Surgeons Act (1966)

affect the profession's monopoly to provide comprehensive care to all clients and animals?

Total Patient Care: Primary Care / Interdisciplinary Care / Collaborative Care

The concept of Total Patient Care (TPC) was developed by nursing science as a model of nursing care whereby a patient receives comprehensive, holistic and unfragmented care by **one** nurse (the primary nurse). Sometimes other nurses will assist under the direction of the primary nurse to perform treatments that require more than one nurse. The primary nurse is responsible for the diagnosis, planning, implementation and performance of **all** nursing care prescribed and its evaluation. It ensures continuity for the patient and facilitates good communication between nurse and patient. It gives the primary nurse a high degree of professional autonomy. There are disadvantages however; one being that patient numbers (demand) could overwhelm the resources (supply) of the practitioner. Another disadvantage is that the practitioner performs many tasks that could be provided by others with less training and at lower cost. A third disadvantage is that the practitioner may not have sufficient expertise in uncommon or novel health problems to provide a high standard of care. For these reasons primary care is rarely performed outside of specific areas such as intensive care or anaesthetic recovery.

Arguably GP vets operate a very similar model of primary care whereby they are the providers of all veterinary care for their patients and clients. A one stop shop if you like. They face the same disadvantages as stated above especially in small practices with two or three vets. Larger practices such as Alan Thompson's mixed veterinary practice and Malcolm Sinclair's (Larkrise vets, see Chapter 5) have adopted a Total Patient Care model that includes primary, interdisciplinary and collaborative care. Both practices have vets and nurses with special interests and expertise [experiential specialists) that range through cattle production and nutrition, cattle and equine orthopaedics, and small animal anesthetics. Although both claim to be general or primary practices, in reality they are interdisciplinary practices where specific areas of veterinary medicine are performed by specific vets with specific interests and expertise. The beginning of Chapter 4

introduces the Larkrise Veterinary Centre with information from their website. It clearly demonstrates how Malcolm Sinclair maintains the claim to be a general practice through a model that encompasses a broad range of experiential specialists and interestingly he does refer to an equine specialist.

Larkrise Veterinary Centre offers a comprehensive and impressive range of veterinary services. It resembles a small hospital rather than a GP practice in that it has a variety of support staff and para-professionals as well as a broad range of facilities and equipment such as a laboratory, ultra sound, X ray and operating theatres for large and small animals. The website states how in-patients are "hospitalised" and they provide isolation facilities for infectious diseases. This is a state of the art self contained 'hospital' staffed by poly-specialists and para-professionals under the umbrella of general practice. The very fact that this practice keeps almost every aspect of veterinary care in house is significant in the claim that all vets are GPs at the professional level yet at a practical level most vets are better seen as experiential specialists. A range of knowledges and expertise is necessary for this practice [Larkrise] to function and there is a clear distinction between which animals are catered for and the areas of expertise in which the vets at Larkrise practice in. Larkrise is an example of why the idea of veterinary specialisation is regarded as being unnecessary for the profession and problematic for some individuals. The veterinary model of general practice is elastic and encompasses many areas of what may be considered to be specialist domains in other professions. To vets the idea of a GP as an omnicompetent practitioner works fully only at the level of the profession. At the practice and individual level vets agree on a degree of non-formal specialisation as being intrinsic to their vision of general practice, which is why the notion of a dedicated specialist threatens the model.

Fluidity of veterinary expertise and parity of esteem

The formal specialist as opposed to the non-formal or experiential specialist would destroy the argument that vets generic training enables them to make intelligent judgements on any animal with any problem. This generic training is important to GP vets who see it as being fundamental to their notion that all vets are GPs and as such can,

if they choose, move from one area to another with ease. The fluidity of veterinary expertise is essential to the veterinary model of general practice because it both allows and at times compels vets to act outside of their regular specialism, for example Malcolm Sinclair attending to the dog with mastitis. Malcolm was compelled by the situation to step outside of his area [farm animals] because of the expectation of the farmer who saw him as the vet and expected he could treat the dog. Malcolm was also compelled to assist because of the RCVS regulations and the law that states that **all** registered vets are not only acknowledged to treat any animal but are **expected** to if requested. Thus legally vets are expected to be able to act as GPs and this extends to those with RCVS recognised specialist status. The fluidity of veterinary expertise also enables the parity of esteem amongst the profession.

The term parity of esteem whose dominant aim is the pursuit of equality originates from political science and is a phrase used to describe how inter-communal conflict is overcome by members of a community recognising the stalemate of their position. Thus communities should try to get along with each other by accepting their cultural and political differences rather than trying to out do each other. It is also used in education to refer to an equality of status between different routes of study and was used by supporters of the tripartite education system introduced by the Butler Act of 1944. It claimed that the three types of education where of equal value[5]. It has been recently used to claim that vocational qualifications are of equal value to academic qualifications. In the context of the veterinary profession I understand the parity of esteem to be the mutual recognition of knowledge and expertise that is acknowledged by its members.Thus no vet is considered to be better in terms of training or qualification than any other. No vet can claim the sole right to perform certain acts of veterinary surgery no matter what post graduate qualifications they may hold. For example Archie Murdoch cannot prevent his former collegue Alan Thompson from attending to sheep nor can he claim that he has superior expertise in sheep medicine than Alan or any other vet. However, in actuality, vets are happy to acknowledge that others may have relatively greater expertise than themselves

[5] Read more: parity of esteem - Education and Training for the 21st Century, Today http://education.stateuniversity.com/pages/3324/parity-esteem.html#ixzz0iuUKhIo5 accessed 09/03/10

in areas of veterinary medicine that they do not practice in. Thus Alan is content to recognise that his partner is better skilled to wire a cats fractured jaw than he is. This informality is significant in understanding how vets as a professional group maintain their unity at least at the level of the profession or the practice. Take Barry, for example, he states he is a GP even though his work is highly specialised. He does not proclaim to be a specialist yet he is content if others within the profession confer the title on him. Malcolm argues "how can they[specialists] know more than I do ?" again I take this be a rhetorical argument because Malcolm freely admits that he is not a small animal vet and recognises the superior expertise of his colleague when it comes to dogs.

The unity of the profession

The unity of the veterinary profession is inextricably linked to this notion of parity of esteem where all vets are considered to be equal in knowledge and expertise even though there is informal recognition that vets have and do develop experiential specialist skills. As Alan Thompson asserts, "we are all trained to do the same". Therefore the idea of the formal specialist threatens to disrupt the idea of parity of esteem and perhaps the unity of the profession for example, Malcolm Sinclair considers formal specialisation to be "divisive". Further, the rigid nature of specialisation may be seen by some vets as being restrictive and reducing the opportunites and fluidity of vets to move from one area of practice to another. More damming however, is that it could force the profession to bi-furcate into two groups the generalists and the specialists thus destroying their vision of what it means to be a vet and the idea of poly-specialism.

8.4 Defending the specialist

In light of what has been said by the aforementioned vets concerning veterinary specialisation it would appear that the veterinary profession neither requires nor welcomes specialisation. Furthermore, it would be a brave and perhaps exceptional man or woman who would put themselves forward as a veterinary specialist, making the claim that he or she had some extra knowledge and expertise that brought added value and

support to the profession, its clients and the individual. One such man is Archie Murdoch, who is an RCVS recognised specialist in sheep health and production. Archie argues that specialisation brings value to all vets and particularly GPs and that the idea of poly specialism so beloved by the profession is at odds with what veterinary consumers actually want. Archie argues that clients are now more sophisticated and expect standardisation and specific to the role expertise in veterinary medicine as Archie states,

> "Vets fail to realise that even within their multispecies knowledge and practice that specialisms add value and support to both themselves and to their client base. There is an increasingly obvious demand by our clients for specific expertise and this needs to be standardised for all of us in order to identify best practice and to promote the specialities to the fee paying public. It is no surprise that farm practice is developed by GPs who spend most of their time following this as this is how expertise has been developed. I have had comments like well I'm too busy actually doing the work to be able to take specialist qualifications. It's a political or academic option and has no relevance to practice. It would cause a lot of trouble with other practices. A formal recognition and a proven peer reviewed system for post graduate specialisation allows a bench mark to be established and to provide the option of another tier of expertise which can deliver and improve services through its own self examination, research and reflection. This gives the end-user a wider choice and a better chance of engaging with independent specialists who can provide a level of advice and practice which complements that offered by the GP even where the GP has a special interest in the field".

Archie's vision of the specialist contrasts sharply with that of the GP or poly-specialist Although he acknowledges that all vets (himself included) have basic generic skills. He does not accept that vets can be expert at everything and as such struggle with certain aspects of veterinary practice,

> "I see expertise as being able to do something well without struggle… all vets have expertise in what they do in an every day situation but no vet would say they can do everything"

An aid not a threat

> "Many practitioners are suspicious of you… you don't want somebody coming in when you've been doing it for thirty years thank you very much. The difficulty is getting them [other vets] to see you as an aid not a threat" (Archie Murdoch)

Archie does not regard specialisation as a threat to the GP on the contrary he sees it as being an asset that complements and increases the expertise of general practice. Also he is aware of changing public demand and expectations that now expect another tier of veterinary expertise that is independent of mainstream veterinary knowledge and practice. He believes that specialisation with an emphasis on independent research, examination and reflection can improve the end user experience of veterinary services to a greater degree than can be provided by GPs even those GPs who may have a special area of interest. Archie suggests that currently there is a lack of standardisation in the veterinary profession and as such veterinary practice and methods may differ throughout the country. He argues that specialisation can identify best practice and thus allows benchmarks to be established from which policies and guidelines can be implemented to establish evidenced based best veterinary practice.

Whilst some farm vets see specialisation as an irrelevance, others are not necessarily against the notion of formally accredited specialisation. Some consider themselves to be too busy to do the necessary qualifications, but others it is interesting to note appear to be afraid of claiming specialist status because it would cause problems with other vets who remained as GPs. Remember Barry when he said he wouldn't mind others referring to him as a specialist but he wouldn't make the claim himself? It would appear that the veterinary *status quo* that all vets are GPs is maintained in part by fear. Fear of condemnation and the lack of peer support and recognition as I have said it would take a

brave man or woman to make the claim to be a specialist outside of the 'permitted' parameters of veterinary specilisation. Archie Murdoch has or at least is attempting to shift these parameters and has developed the notion of veterinary specialisation from more than the clinical and the hands on to a commentary of key issues within veterinary medicine and the profession and he has built a very singular specialist practice.

A very singular specialist

Archie Murdoch does not claim to be better than his peers in terms of clinical ability yet the nature of his specialist consultancy does set him apart from them. It has taken considerable time during the fieldwork period to unravel just how he performs his role as a specialist and to who. He does not function as a clinician, in this I mean he does not treat sick animals nor is he called in to give an opinion on complex or novel diseases rather he acts as an advisor. The advice he offers ranges from aspects on health and production in sheep but also as an advisor and commentator on animal and veterinary issues ranging from welfare to law. His audience is not as one may expect a veterinary audience but includes stock keepers, government, pharmaceutical companies and animal welfare organisations to name but a few. In fact, Archie is a professional veterinary expert largely for non-vets.

Archie performs his specialism at an ideological level and an individual level. By this I mean he is consulted by a variety of groups and organisations (as previously mentioned) for his expert voice as both an exponent of veterinary expertise as a member of the veterinary profession and as an **independent** practitioner. Thus, Archie is called upon by non-vet groups and organisation to provide a singular, in-depth voice on key issues arising in the veterinary profession **and** as a specialist advisor and commentator on issues relating to his specialist area of sheep health and production. Archie actively raises his profile and extends his networks beyond those in the veterinary profession in order to be listened to and give his opinion. Importantly then he rarely requires a veterinary audience to express his claim to be a veterinary specialist. Within the profession he is 'known' and is as much involved in veterinary politics as he is a clinician.

Concluding remarks

This chapter demonstrates how the debate over specialisation illuminates the nature of veterinary authority. Authority resides largely in perceptions of the vet as a poly-specialist (a vet for all seasons) and it also depends on the unity of the profession. It has been eighteen years since the RCVS allowed vets to claim the title of specialist yet only a fraction of them appear on the specialist register. Formal veterinary specialisation in private practice is underdeveloped as it appears that vets see it as being at best an irrelevance and at worst divisive as it threatens to split the profession. The profession's unity is and has been cemented by the notion of the general practitioner and general practice. At the professional ideological level, there is a rhetorical claim that all vets are equal in terms of ability and knowledge and therefore can perform **any** act of veterinary surgery on any animal without additional training. However, in actuality at the individual and practice level it is acknowledged that the GP is not omnicompetent and therefore the profession allows for a degree of non-formal experiential specialisation. Further, veterinary GPs are better seen as being poly-specialists as they perform many different roles that in human medicine would be demarcated. Although many of their claims are rhetorical - for example "I only need a two week refresher course to go back to clinical practice" or "I could do a caesarean on a dog if I chose to" - what they are doing is reserving the **right** and **privilege** to perform any act of veterinary surgery even when in actuality it is a remote possibility. Currently vets have no **need** to specialise because they can in law do everything. Parity of veterinary esteem means that they do not need to **prove** themselves to anyone within (or outside) the profession. They see on the job and short training courses as being enough to maintain and improve their individual and collective expertise. This allows informal expertise and experiential specialisation to occur at the practice level. It is precisely this that maintains their vision of general practice and what it means to be a GP vet. The notion of specialisation threatens this vision and would in their eyes de-skill the GP, remove their right and privilege to be **"vets for all seasons".**

Archie Murdoch contests this, although he concedes that all vets share generic skills he argues that these do not translate into comprehensive expertise and that when confronted with something outside their every day experience vets will struggle. He disputes that specialisation weakens the professional authority of the GP but rather it can enhance it. This is (or could) be achieved by specialists being used as specific points of reference for matters outside the range of everyday general practice. Specialisation, he claims, allows for the establishment of a bench mark of best practice and facilitates standardisation. Importantly it provides both the GP vet and the veterinary consumer another tier of clinical expertise that serves to complement the GPs expertise and provides the consumer with greater choice. Despite this Archie acknowledges that many GP vets are suspicious of specialists and regard them as a threat to their professional standing and business. Some GPs dismiss the specialist's claim of providing an upper tier of expertise and know-how because they do not recognise the validity of the specialists' qualification "How can they claim to know more than I do?" " I wasn't trained just for this [specialisation]… no vet is, we are all trained to do the same, there is no specialist training courses for vets as there are for doctors". For these and other reasons, Archie Murdoch has had to find an audience other than vets to demonstrate his specialist status. He addresses a variety of groups and organisations on veterinary issues and by doing so he has raised his profile within the veterinary profession as a singular commentator of veterinary politics and issues. Archie concedes that a significant part of his living is made from doing locum work and that his specialist activities are often *Pro-bono.* Archie Murdoch is as I have stated is a pioneer and a singular commentator of veterinary affairs. To many in the profession he may be regarded as the 'black knight' or given his area of speciality the 'black sheep' of the profession whose radical views threaten the stability and cohesion of the profession. Although he has a high profile the fact remains that veterinary specialisation is in its infancy and a retarded infancy at that. Veterinary specialisation has little chance of developing into a mature, independent and mainstream discipline of veterinary medicine…at least not while **sleeping vets lie.**

Chapter 9

Conclusion

9.1 Introduction

This thesis has explored the notion of veterinary expertise beyond that of scientific and technical knowledge. It has revealed that veterinary expertise cannot be easily defined or compartmentalised because it is a relational, fluid concept that depends on the different roles that vets play as individuals and as a collective profession and how they are perceived and trusted by society. The commonly held belief of professions is that they are powerful (Dear and Wolch, 1987) and their power is derived from their specialist knowledge, codes of practice, modes of organisation, state sanctioned authority and legal definitions. The veterinary profession though, as this thesis has demonstrated, is a small profession compared with others such as law and medicine and they lack the same level of power and authority. Like other professions, the veterinary profession acts (or tries) to monopolise its position and status but in recent years (indeed throughout its history) there have been several 'threats' to vets monopoly. First, high profile public health crises (e.g. BSE) where vets were marginalised; the Lowe report (2009) which highlighted the underdevelopment of specialisation in the veterinary profession which has led to the RCVS convening a working group (in 2011) led by Sir Kenneth Calman to explore this issue and third, the growth of para-professionals. As Dear and Wolch (1987:18) argue, professions monopolise their authority and status by "emphasising the dangers that may arise if their professional skills are ignored or misused". However, there has always been 'alternative expertise' in the area of healing animals e.g. the cow leech, farrier and farmers who often work in parallel with vets (though maybe not acknowledged by them). This thesis has focused on professional expertise but now at the end of the journey it came to me that expertise is more than formal expressions and I began to think about my own family because it could be said that I come from a medical / veterinary dynasty… well of sorts.

9.2 ‘Don’t upset the monkey’: or my family and other experts

My paternal great, great aunt was described as a “midwife”. I say “midwife” because she lived and “practised” in an area called Cannon Street, Middlesbrough. If you from Middlesbrough there is no need to explain Cannon Street, if you are not, think of it like the East End of London or the Liverpool Docks. Anyway, Great Aunt Alice was actually an unqualified birth attendant (remember there was no NHS in the nineteenth century and even a midwife could be the equivalent of a days wages). More than this however, she was an abortionist. Please don’t be shocked remember this was an age before contraception or legal termination and to many a child was simply another mouth to feed or something to die in infancy. So Alice played an important role in the wellbeing of a desperately poor and hardened community. Alice committed suicide.

My great grand dad was a steeple jack who had a part-time line as a bone setter (an early osteopath) and was something of a surgeon. He had been in the Royal Navy as a medical orderly and was referred to (by my dad) as a “Loblolly boy” (a very old term given to a ships surgeons assistant). He made a small income from attending to the cuts bruises and occasional fractures that the men of Cannon Street suffered, often following the Friday night fight. He too, incidentally, died questionably having fallen from a steeple during the night. His brother ran a chip shop and he supplemented his takings as a dentist or tooth puller. Remember, when it cost half a crown for a tooth to be pulled by a real dentist with gas many would either suffer the pain of a rotting tooth or undergo great uncle George’s ministrations for a tanner (sixpence).

The veterinary side comes from my maternal forebears. My grand dad was a ‘failed’ vet. I say failed in that he wanted to become one but had neither the education nor the money to go to veterinary school. He became a chemistry technician with the ICI agricultural division. His father, however, had been according to family folklore, had been an actual vet practising in Danby, North Yorkshire. I wondered as I got older why if he had been a

professional man with a presumably comfortable income and social status living in rural Yorkshire we all lived in council houses in Middlesbrough. The truth eventually unfolded due to my wife's prodigious efforts as a genealogist. She discovered that there was indeed a man of my great grandfather's name offering 'veterinary' services in Danby up till 1951. This was however yet another sideline as he appeared to make most of his income as a farm labourer and shoemaker. I assume the advent of the 1948 Veterinary Surgeons Act put an end to his career as a 'vet'. However, my cousin decided to carry on in the family trade and for as long as I can remember he wanted to be a vet. From his early teens he spent every Saturday and several evenings with Mr Haith the vet (more of him later) helping out and observing. He also visited farms and worked unpaid, in fact he did everything that is now expected of potential vets. He worked hard at school and sixth form (unlike me I wanted to be a doctor, by the way, but was too stupid so I became a nurse) and obtained very good A-levels in Biology, Chemistry, Physics and Applied Maths. So to say we were surprised that he was rejected by all the veterinary schools he applied for is an understatement. It transpired or at least this is my cousin's story, that he was not deemed good enough to be a vet because of his lowly background. However, it may have also been due to his conviction for indecent exposure I will say no more. When I suggested that he become a veterinary nurse he said "Bollocks if I can't be a vet I'll be rich instead". Thus in the summer of 1983 he left for Jersey and true to his word became rich. He is now a Jersey resident with a number of business interests including hospitality and a Porsche and Mercedes dealership. I, on the other hand, not being able to become a medic, settled for nursing. Now at that time male nurses were still considered to be an exception, even an oddity. An adage at the time was that male nurses were one of two things… frustrated doctors or homosexual. Indeed, as a student I was asked which of these I was by a hatchet faced, ignorant and bigoted old Sister. Quick as a flash I replied "Neither ducky I'm a frustrated vet but let me know who your hairdresser is and I'll have him doctored". Anyway I digress; my other link with the veterinary profession is with our family pets. We had the usual array of small animals that were popular at the time such as a rabbit, a hamster, a budgie, a gold fish and even a tortoise. This was the 1960s and sadly then tortoises could be bought more dead than alive from a market stall as indeed could puppies and kittens. We did not have a dog at that time or more precisely my mam

and dad did not have one, we shared my cousin Dave's racing Greyhound. He was a proper racer who ran under the name of Just-Jill (a combination of me and my sister's names) but who was known to all of us as Fawney. Fawney got the best in every respect; he ate steak and carrots with pasta whilst Cousin Dave and my Uncle Albert and Aunt Florrie ate egg and chips. He had his own armchair next to the fire and slept on Cousin Dave's bed at night. He got the best in veterinary care as well. There were at that time two vets in Middlesbrough (not counting the PDSA) Mr Starkie and Mr Haith. Now although Mr Starkie was the official vet for the greyhound track Cousin Dave chose Mr Haith as he considered Starkie "A bloody butcher". Starkie's practice was 'Down the town' that is, it was in central Middlesbrough and he also had kennels for the Police and RSPCA. Cousin Dave considered it to be death row. Mr Haiths surgery was in Linthorpe (Middlesbroughs posh bit). It was a large Victorian house set in its own grounds and described itself as an animal hospital. Mr Haith charged more but he was considered to have greater expertise. Thus, when our pets needed veterinary care it was Mr Haith who we consulted. Oddly however, we did not take the budgie to him instead we went to my maternal granddad, you know the failed vet. This was because his passion was breeding budgies and he had an extensive and elaborate aviary and what's more a deep and thorough knowledge of budgies. So despite Mr Haith being the qualified man we considered granddad to have superior expertise and knowledges, at least with birds.

Later when our dad died, our Mam bought me the first of many dogs I have shared my life with since. Naturally we went to Mr Haith even though we qualified for the PDSA. The reason for this is partly that Mr Haith was considered to be the best vet and also snobbery. Although a widow with a pauper's income our mam was upper working class with middle class aspirations. So for us to take charity from the PDSA or worse still consult Starkie the butcher was an anathema. Therefore, when first Cindy, Bonny, Sam and later Norman needed the vet it was Mr Haith who we consulted even if this meant hiding behind the settee from the rent man because the rent money had paid his fee. I believe Mr Haith was aware that many of his clients were in similar circumstances and as far as I can recall he did not advertise his fees but charged what he thought the client could best afford, a form of cross-subsidy. I distinctly remember being (or our mam) only

being charged five bob (twenty five pence) for a vaccination. Today by the way I pay £25.

My mother eventually remarried. His name is Jack and had a keen interest in tropical fish (all the rage in 1970s Middlesbrough). He created marvellous and exotic aquariums in the house and used the wash house as a living food and aqua habitat supply base. It also became a laboratory of sorts. You see Jack was not just keen on fish he was something of an expert. He had and has an encyclopaedic knowledge of fishes, their ecology, habits and health and disease. How he developed these knowledges is unknown as he proudly states to this day "I've never read a book in my life". Yet the fact was he knew about fish…and others thought so too. He was always being asked for his advice and opinion by the tropical fish fraternity and by pet shop owners. They simply would not consult a vet, in part; I suppose they thought who takes a fish to the vet but also because they felt that Jack knew more. He never charged for his expertise (to my mothers' annoyance) but would receive a pint or a favour in return. He could diagnose a variety of ailments in fishes and would mix up a concoction to effect a cure. He understood the principles of infection and quarantine and hygiene. Many a time he would be lauded in the social club as the bloke that saved Kenny's Angel fish from fin rot or brought back Davies's Black moor from the brink of death with a drop of brandy and methyl blue.

One Saturday morning Jack announced that he was going to see Alan the pet shop man in nearby North Ormesby (pronounced nuthormesby in Middlesbrough) who had recently got a consignment of fish that were dying. Jack was his first choice not the vet. Jack said I could go along with him but warned me "What ever you do don't upset the monkey". "The what?" I cried out in astonishment and excitement. It transpired that Alan kept a small monkey called Eric as both a companion and something of a guard. Eric had the run of the shop and the flat above and could be aggressive especially with women so I was told. Now at this time I had as was the fashion long hair and although I don't think I looked particularly feminine but what was to transpire was put down to my girlish looks and behaviour. We arrived at Alan's, me resplendent in my Gary Glitter platform shoes, bell bottomed jeans, a purple nylon shirt with an elephant ear collar and matching bry-

nylon tank top with yellow shooting stars and of course a luxuriant head of shoulder length hair cut in the style of Rod Stewart. As we entered the shop my heart did cartwheels, there was Eric, a small brown and beige monkey sat on top a big square cage with a parrot in it. Eric was annoying the parrot by sticking his fingers in the cage and then smacking the top bars as the parrot (who was angry) tried to peck him. Alan came out from the back were he kept the aquariums and said to Jack "Oh you've brought him along". "Well son just you behave yourself" he said to me. He and Jack went into the back and Jack turned around and gave me a final warning "Don't go near the monkey" … So of course I did. I approached Eric slowly; I was in raptures…I had never seen a monkey outside of a zoo or telly. Eric stopped annoying the parrot and sat and stared at me. What a lovely chap I thought as I put my face toward him. What happened next is still something of a blur almost forty years on. I remember the most exquisite pain in my mouth, nose and eyes and the glass shattering screech as Eric with the speed of light and arms like iron rods punched me repeatedly in the face, nose, eyes and mouth. He then grabbed me by the hair and pulled me into the bars of the cage and repeatedly banged my head and slapped me. I did not dare cry out but tried extricate myself from Eric's iron grip which only made matters worse as Eric then head butted me. Jack and Alan rushed out and Alan shouted something like "Let him go Eric he's had enough". Whilst Jack, his face black with fury said "What did I bloody well say to yer". I stood trembling covered in bruises, scratches, tears and snot with great clumps of my hair that had been wrenched from my scalp draped over parrots cage Also I had the sickening pain in my right ankle were I had twisted it in my built up shoes trying to get away from Eric.. Alan and Jack ignored me and examined Eric for injury. The thing is, what appalled me most that day was not the pain, the shock or the lack of concern for my wellbeing but the shame. The absolute, gut wrenching shame of being beaten up by a monkey that could fit into a haversack. I never went back to that pet shop and never saw Eric again although I did read about him some years later in the local paper when he was hailed as a hero for cornering two would be burglars in the shop who gave themselves up meekly to the police.

When we returned home our mam was understandably upset and concerned. Monkey attacks were rare events so I was taken to see our neighbour Pat the nurse (pronounced Patthenurse). Pat was a nurse and midwife and the local source of medical advice and expertise. Pat was consulted on all manner of medical and health issues ranging from chicken pox, wasp and bee stings to cancer. When Mr Milburn over the road developed stomach cancer and came home to die Pat supplemented the doctor and the district nurses services in an unofficial but more familiar and friendly manner. Anyway Pat examined me from head to toe in her living room whilst her husband who is incidentally also called Eric watched world of sport. She disinfected my head and face with diluted dettol and prescribed vinegar soaked flannels and compresses for the bruises and twisted ankle. We did not have frozen peas back then as no one who I knew had a freezer. In time the bruises healed, my ankle got better and my hair sorted itself out. However, I have always remained wary of monkeys ever since. Especially small ones.

We had scores of fish, each more exotic than the next but my all time favourites were Julian and Beaky, two Amazonian Piranhas. I learnt from Jack that despite their fearsome reputation they are quite timid and placid fish and make good pets. And provided they have been fed will not harm a living sole….or should that be soul? I would amaze and astound my friends by placing my hands in their tank and gently stroking their underbellies. They were fed once or twice a week on live goldfish until the woman from the local pet shop found out and caused an uproar. From then on J & B received various meats that had to be swished about in the tank to create the illusion of a living prey. Julian and Beaky came to a sticky end however. Whilst we were away one of Jacks friends was appointed to see to the fish and managed to turn the electric power off the tanks. Alas J&B were no more. This had a devastating impact on Jack and within weeks he had sold off his fish and tanks, cleared his lab and never bothered with them again. He has never said anything about this but I believe he genuinely grieved for these two fishes. Who would ever admit to that? It's preposterous…humans grieving over fish! or any animal.., what ever next World peace and the end of poverty and injustice! It's just not on.

For the last sixteen years my wife and I have shared our lives with five dogs - Basil, Molly, Roger, James and Edward. Basil a cross Border Collie and Jack Russell was bought from a pet shop in Hessle near Hull. Molly an Alsatian was a rescue dog from an East Riding pig farmer who set up a dog rescue centre for no financial gain. She had been picked up by the police wandering the streets of East Hull. She was underweight and frightened. She remained a gentle but timid dog for the rest of her life and was never quite at ease with people other than us and certain vets. She was not spayed when we got her and you can guess the rest. Roger and James et al. Molly had eight pups in all and through our vet we homed six to good caring people. Molly soon developed health problems in particular an under active pancreas which led to our increased contact with vets. She however, defied veterinary opinion and with good care and complex medication and dietary management lived till she was thirteen succumbing to canine lymphoma. Even this though was managed between us and our (new) vet so that she had a good six months of quality life before the inevitable. Basil on the other hand died at eleven from cancer of the spleen and was mismanaged from start to finish by a vet whose main skill was in euthanasia. This year (2010) to our enormous and deep sorrow both Roger and James died within five weeks of each other. Roger from a suspected brain tumour and James from renal failure. Roger had health problems since he was eight and again this meant that we had probably more contacts with vets than most clients. The boy Edward is still with us (although he is now in veterinary terms a geriatric). We found Edward in the winter of 2000 having been dumped to fend for himself at the South Gare in Redcar. He was close to death; he was starving and had drunk salt water. However, with good nursing and veterinary input he recovered but to this day remains a timid dog who mistrusts most people.

Why am I writing all this drivel, the life and times of Justin Armstrong and associated animals? Well I am trying to explain to you, the reader, that there is, and always has been *alternative expertise*. Despite the fact that there is a clear progression into professionalism people make choices on whose expertise, knowledge and advice they will accept and those they will reject. People and I include myself; use a variety of criteria on whom to consult. Sometimes economic and social circumstances are the

determining factor, for example, Great Aunt Alice. Other times, it is simply down to belief and trust in a persons experience for example, Jack, even when 'official' experts are both accessible and affordable. For others it is familiarity and friendship. Even amongst the 'qualified' experts people will chose one against another even when one is officially recognised as being a greater expert than the other for example, Mr Starkie and Mr Haith. These vignettes have I hope illustrated how fluid and interpretive the notion of expertise is. It is not enough to simply have letters after your name to claim the title of expert. To me however, the way I understand expertise is this - expertise means different things, to different people at different times and different places. Now read on.

9.3 Concluding comments

The vignettes of alternative expertise explain expertise as being tacit ability, experience, trust and familiarity. These are also important to more formal expertise but in addition formal expertise is underpinned by legal rational authority. All healers have Aesculapian authority and some degree of specialisation. Whilst informal (for example, alternative expertise) and formal expertise require and develop Aesculapian authority for example, Jack the healer of fishes, the formal expert attempts to gain a monopoly and exclusive right to perform through the acquisition of legal rational authority, for example, recognised qualifications and accreditations. Added to this is the idea that experts focus their knowledge and skills into defined (specialised) areas. Therefore, to understand veterinary expertise and authority this thesis developed the concepts of specialisation and Aesculapian authority. In bringing together the insights through these two parallel strands I have developed the notion of professional expertise in relation to vets and revealed the complexities, weaknesses and strengths of veterinary specialisation and Aesculapian authority and how this relates to the concept of veterinary expertise at the individual and professional/institutional level. In particular, I have demonstrated that specialisation in veterinary medicine remains underdeveloped. This is in part due to the unwillingness of many vets to accept that another vet can make the claim to have specialist skills and knowledges. Also, because vets claim they are trained as "men for all seasons" they have evolved as I say as poly-specialists able to perform the roles of surgeon and physician.

However, this is largely a rhetorical claim because, although veterinary training is broad and covers many aspects of practice, in reality vets work in defined areas of practice such as small animal / farm animal and so on. In saying this though they do have an argument that singular specialisation is a redundant notion. This idea, poly- specialism, (where vets perform the roles of both physician and surgeon to all animals) and the fact that vets are considered (at least by themselves) to be able to perform any act of veterinary surgery on any animal as determined in law reinforces their claim to be thought of as 'generalists' as a profession and it cements the idea of parity of esteem that is, all vets are equal in terms of ability and knowledge. So if they wished they could with only minimal refresher training move to a completely different area of practice. This as I have discussed would be extremely difficult in other professions for example, medicine where by and large once a particular area of practice is chosen doctors must remain with it.

Aesculapian authority (AA) is harder to understand. It has not been interrogated before and has been accepted as a given for doctors and most recently applied to vets (Rollin, 2002, 2006). The concept of AA was introduced by Patterson in the 1950s and was originally applied only to doctors. He used it as a means of understanding the special and unique authority that doctors possess. AA in this interpretation is embodied in philosophy and religion as it is claimed that AA is also a quasi religious and mystical concept. Later Rollin (2002) developed it and made the claim that vets because they are healers must also posses AA. Rollin however, has found it hard to apply to vets performing roles that are not considered to be healing roles such as abattoir vets. This thesis has discovered that AA is not a philosophical or essential given but rather an invention or social construct. Further it has demonstrated that vets have to develop and constantly maintain AA in order to claim expertise and authority and that certain aspects of AA do not always work for vets. Thus they must fall back on other notions of authority such as legal rational concepts and this is why Weber is useful in understanding AA from a veterinary perspective. There is one aspect of AA that is unique to vets and is extremely potent. This is the utterance and performance of death. Vets are truly unique amongst the healers in that only they can end the life of their patients. They decide when a life is no longer worth living and utter the sentence of death. However, as I have discussed AA is a social

construct therefore for some vets it is difficult to achieve. These vets are on the margin of the profession and work in areas such as abattoirs therefore, they are not the image of the healing vet thus it is harder for them to claim AA in the way in which it is defined. There is a *technocratic* aspect to veterinary medicine that challenges this notion of all being generalists and thus equals. It splits the profession and its members into different roles such as animal engineer, healer, and food safety expert and so on thus making AA more difficult for vets to achieve than doctors who are considered to be essentially healers. Another example of how this technocratic aspect divides the profession is between food animal and small animal practice. For example, small animal medicine is considered (at least by farm vets) as pandering to human vanity; therefore, pets are viewed as luxuries - "its not proper vetting" despite the fact that this sector is highly skilled in medicine and surgery. It appears that this is seen as a female role whereas the farm work is still considered by many to be a highly masculine area. There is also, an *administrative* aspect for example, when government expect or demand some vets to be experts in certain areas such as public health. Again the small animal sector is sidelined; they are not important to the government in fact one senior DEFRA officer told me that the only useful purpose for the small animal vet was "as a reserve for the farm vet in a public health emergency in food animals". Thus food animal vets are considered to have more public good relevant expertise and hence more value to the government in terms of public health even when one considers the public health role (in its broadest sense) that small animal vets play. There is also an *economic* aspect where the market decides what vets it wants and what it is willing to pay for. The original purpose of vets was to improve food animal productivity and treat their diseases. However, due to national security, warfare and the growth of horses in cities as transport they soon focused their attentions on the horse whilst other animals were largely ignored. Only later did they become embedded with agriculture - a most important industry. Yet animal disease is not considered as important as human disease and where humans have an extensive and hugely expensive state health service that is free at the point of delivery agriculture does not. And it would be unthinkable if general taxes were spent on providing an animal NHS for pets. Thus vets in practice are and will continue to be in the private sector and as such will be dependent on market forces. It may be that a vet would like to concentrate on

one sole area of practice, oncology for example; however, it is unlikely that this would be sufficient to make a living. Further, if agriculture continues to contract some vets may be forced into choosing small animal practice out of necessity as happened years ago

The concept of specialisation in veterinary medicine is backward looking and complicated. It points to inherent weaknesses within the profession rather than strengths. The Lowe report (2009) raises criticisms of the fundamental weakness of veterinary governance in relation to specialisation. There are two factions within the profession who have different views on the idea of specialisation that make it unnecessarily complicated. The RCVS regards specialisation as scientific whereby specialist vets advance the knowledges of veterinary medicine in specific areas. The BVA is more customer focused and regards specialisation to be an added value service or product that enhances the vets' income stream. Thus some traditionalist vets (including Malcolm Sinclair) see specialisation as nothing more than trade. Vets are however good at 'role specialisation' and finding economic and policy niches and again the RCVS has abstractive views on this whilst the BVA is more practically orientated. As 'functional specialisation' the BVA as demonstrated in Chapter 3, is locked into historical structures such as specialist areas of cattle, sheep and so on, this makes it difficult for them to keep up-to-date. To understand the role and responsibilities of the RCVS and the BVA the work of Walter Bagehot (1867) is useful. Writing about the English Constitution, he made a distinction between the 'efficient' and 'dignified'. The efficient aspect of the constitution 'does things' for example, the House of Commons therefore, in veterinary terms this would mean the BVA who deal with the practicalities and 'down to earth' issues of veterinary practice. The dignified refers to the pomp and circumstance, the show and in the constitution an example would be the monarchy or the House of Lords – in veterinary terms this means the RCVS who are the public image of the profession and its regulator. In this thesis I have looked at the individual and group level and revealed that the profession presents itself as a unity and the organisations that do that are the RCVS and the BVA. Therefore, AA is not just an argument about the function of individuals but also resides in the way the profession organises itself and the authority of the profession is mediated by its professional structures.

However, there are dilemmas in being recognised as a profession and this dilemma pushes towards specialisation. This involves a dynamic combination of scientific and market mechanisms. To be a professional within an organised profession suggests a way in which one safeguards a territory and you do that by emphasizing the unity of the profession. Professional unity is important as professionals operate at two levels, one as an individual and the second as a collective. It is the collective level that provides the individual with the professional and collective identity. This level enables members to communicate and negotiate with large concerns and organisations such as the government. It also provides you with a monopoly (which is legally constituted) and you can defend this monopoly because you have the organisational structure that allows you to relate to the state and others. At the core you project a unity to the world because you have or are perceived to have a sense of internal unity. Is then such a dynamic created or set up at the individual level?

The individual practitioner survives as an individual business but acts as a collective or the representative of the collective to the public. However this collectivity can be undermined by specialisation and economic forces. Science also undermines the exclusive authority of the vet for example with growth of animal scientists and biologists who claim may to have knowledges superior to veterinary medicine. Science produces radical crosscutting new technologies and solutions that only vets once could. Science threatens the monopoly of the vet and especially in animal pharmaceuticals whereby the vet can be bypassed and the drugs sold to and administered by animal owners. Thus although science can build up specialist knowledges and elaborate technologies that may underpin and facilitate veterinary specialisation it can also undermine the vets sole authority in animal health and actually facilitate deskilling. For example the invention of ultrasound equipment has encouraged the growth of non-vet technicians involved in cattle pregnancy testing.

Adding to the vets anxieties is the growth of para-professionals (which incidentally are not a new phenomenon as the example of my granddad demonstrates) who offer certain

aspects of once exclusive veterinary services. These range from equine dental technicians and physical therapists to cattle hoof and horn trimmers and range of 'specialist' technicians from nutritionists to fertility 'experts'. They exert a commercial pressure on vets or at least those involved in the farm sector. It causes the vets traditional territory to shift, as it perhaps always has. In response, the individual vet must move with the times and the territorial shift. to avoid being overrun and must establish a more defensible territory. The most entrepreneurial may employ para-professionals or discount the sale of medicines, but at times this may become a cause of conflict with the profession as a whole and its regulator. Some practices are seen as being little more than retail druggists or supermarket vets who offer a large range of services and experts under one roof who threaten the viability of the small traditional practice. However, the weight of veterinary authority can be utilised in the interests of the small vet practice, they can call upon the profession with its rules, regulations and ethics and indeed its almost 'mythical' and legendary expertise that endows vets with the "power to heal" to counter the threat from the lay technicians who have little history, little governance or self determined regulation and thus have only weak claims to Aesculapian authority. If they have any at all

Despite this, the sense of tension remains and vets are defending an increasingly fluid space. At the present time vets still hold a legal monopoly on the supply of veterinary services that are defined as Acts of Veterinary Surgery. But this is subject to challenges from non-vets who deploy a number of strategies to circumvent veterinary authority. Unlike the human parent and child relationship in medicine the animal owner can do pretty much what he likes in terms of animal health care. Thus there is a constant pressure of alternatives to traditional veterinary authority. Vets try to occupy the professional space between the client and the animal and defend it by marshalling Aesculapian authority, supported and reinforced by legal rational authority. They must market themselves as poly-specialists rather than singular specialists in order to hold ground and see off lay competitors. Some do however, specialise in certain things, such as Malcolm Sinclair who chooses to practice farm animal and equine medicine but does not want to be viewed as a specialist either by his peers or the public. Thus he will when required leave his comfort zone and attend to the health needs of a dog for example.

Sinclair is embedded within the traditional hierarchy of the profession. Archie murdoch on the other hand defends his professional space by attack rather than entrenchment. His approach is highly fluid and is constantly pushing the boundaries of veterinary professionalism to achieve his vision of the veterinary specialist.

9.4 Revisiting the research questions

The thesis began by asking three analytical sub-questions which were borrowed from the nursing scientist Dorothea Orem (1979/2004; 2001) who wanted to gain a better understanding of nursing and nurses. She asked three questions and they were:

d) What are nurses
e) What do nurses do
f) Why do they do it?

A result of this research was the development of the Orem model of nursing that places the patient or client at the centre of health care provision. This encourages them to take ownership of their health needs as opposed to the medical model that abducts the patients decision making powers. The Orem model also facilitates the exchange of knowledges and expertise between patient and healer rather than the flow of knowledge and expertise from the healer to the patient. Something perhaps vets and their clients and indeed patients could benefit from.

Thus I asked these questions:

a) What are vets?
b) What do vets do?
c)Why do they do it?

This thesis has demonstrated that vets are many things to many people and that they perform different roles at different times, at different places and to different audiences -

human and animal. They are members of a profession that is bound in tradition and a strong moral and ethical code. Yet at an individual or practice level they are small business people who contract and sell their services to an increasingly discriminating market. They rely heavily on their legal authority to maintain a virtual monopoly on the supply of animal health services and they have not developed their Aesculapian authority to the same extent as doctors. All the vets that responded told me that they had a lifelong interest in biology in its broadest sense. For example an interest in animals, in agriculture, in the countryside and wildlife and simply how living things worked. This helped me to understand vets and fed into the three main research questions which I turn to next.

The first research questions asked - *What makes up veterinary expertise apart from scientific knowledge and technical ability?*

The starting point was that veterinary expertise is more than scientific and technical competence. This thesis has argued that it is embedded in notions of power, trust and authority particularly Aesculapian authority (AA).AA is uniquely powerful authority that is conferred by society upon its healers. Although once thought to be exclusive to doctors and the medical profession, this thesis has demonstrated that veterinarians also possess this authority. However, in the veterinary profession it is different and differentiated. I have argued that AA is not a philosophical 'truth' independent of human belief or thought but a human construct and invention. AA was originally applied to and accepted by doctors who 'allowed' the public to then confer this authority on them. For vets however, it has been more difficult. They [vets] have found it harder to develop and maintain. I have demonstrated that in many instances core aspects of AA do not work for vets, for example Sapiential authority has limited appeal to Malcolm Sinclair's clients. This is due to the different roles that vets perform and from what society expects from them. Veterinary expertise is also dependent on generalisation and niche practice or as I argue 'poly-specialism'.

This thesis has demonstrated that veterinary specialisation is difficult to achieve and at times it is contested by the profession. It remains underdeveloped compared to

neighbouring professions. Most vets express their expertise and credibility through what they refer to as general practice or generalisation. This thesis has shown that in fact vets express expertise through poly-specialism and there is a high degree of experiential specialisation and areas of special interest in the profession. Yet most vets, even those working in highly defined areas of practice, refer to themselves as GPs, thus asserting the right to treat any animal with any condition should they wish.

Underpinning VE, credibility and authority is the notion of trust. This is because animal owners have little option but to trust the vet to do the right thing at the right time. They (non-vets) lacking the vets special knowledge of animals and diseases and their legal authority and monopoly to supply veterinary services compels society to accept the vets credibility and authority on matters concerning animal health. However, as I have demonstrated veterinary credibility and authority has and continues to be challenged by non-vets and unlike doctors whose authority is rarely challenged vets have constantly reinvented themselves to meet the expectations of and thwart the challenges of society and the threats to their expertise.

The second research question asked - *How does veterinary expertise differ between the different roles that vets play?*

In the spectrum of veterinary medicine and science vets perform many different roles from that of physician and healer of animals to that of mechanic and engineer of animals. They are also enforcers, regulators advisers and implementers of animal related policy. Uniquely amongst the healing professions they kill their patients when **they** consider life must come to an end. These different roles are influenced by their expression of Aesculapian authority. For example, certain aspects of their Aesculapian authority are constructed differently for the different roles they perform. The farm vet as exemplified in Chapter 4 depends much more on developing and constructing charismatic authority than sapiential. Whereas the specialist vet as exemplified in Chapter 5 develops and construct sapiential and moral authority. The government vets such as those working in Animal Health depends on moral authority embedded in legal-rational authority.

Aesculapian authority then is differentiated in vets according to their roles – but as this thesis demonstrates the 'roles' are performed differently according to the 'stage'. Goffman's dramaturgical perspective (1959, 1961, 1964, 1974, and 1981) as developed in Chapter 6 was especially useful for revealing the fluidity of veterinary performances according to whether the role was front or backstage. The 'personal front' aspect of the veterinary front stage performance (see Section 6.3.1) reveals that personal front is closely associated with charismatic authority. Goffman's dramaturgical perspective enabled me to apply a sociological perspective to Aesculapian authority to reveal the ways in which formal expertise is bound in authority and power.

The third research question asked - *What holds the profession together?*

What holds the veterinary profession together is the claim that all vets are *generalists*; that all vets can do each others jobs if they wished. They claim that if the so chose they could do sheep health and production in the morning, advise on cattle nutrition at lunch time, wire up a cats broken jaw in the afternoon and perform a Caesarean on a dog in the evening. However, this is largely rhetorical because as I have demonstrated vets tend to perform in defined areas of practice which in other professions may be considered specialised. Indeed this generalist / poly-specialist performance does not occur in other professions. Human GPs for example, (who vets most closely identify themselves with) do not perform anywhere near the variety of roles that "GP" vets perform. This notion of being all things to all men and that all vets are essentially equal serves to create the notion of parity of esteem. Where all vets are considered to be of equal value. It is something of a mantra with vets in that they all say that we are **all** trained as GPs and therefore we become GPs, "we are not trained as specialists". The RCVS until 1992 cemented this notion of generalists by forbidding vets to claim specialist status. However, gradually veterinary specialisation has crept in and although specialists account for around two percent of registered vets their numbers are growing. This is more apparent in the small animal and equine sector where demand appears to be greatest. The growth of pet insurance company's has no doubt facilitated specialist provision. Specialisation in the farm sector however, is insignificant and with the exception of certain areas such as

pigs and poultry neither farmers nor vets want specialists. A Yorkshire dairy farmer told me that,

> "I don't want to be buggerin about chasin up different vets for different jobs an payin through the nose for the privilege. Wor ar want is a chap that can do the job I ask im to do".

9.5 Considering the wider implications of the thesis

The thesis has revealed that veterinary expertise is more than medical knowledge's and technical competencies. This final section summarises and critically reflects on the main findings of the research and will be of particular interest to government and the veterinary profession itself.

Veterinary expertise: different and dynamic

The thesis has demonstrated that vets draw from a rich array of expertise resources in order to express their professional identity and authority. This includes their medical knowledge's and technical competencies but more that this, their expertise develops from experience, trust, respect, familiarity, credibility, tradition, their legal authority and the elements of Aesculapian authority – charisma, wisdom and morality. However, the different resources of expertise upon which vets can draw are highly fluid and diffuse. The thesis has revealed the dynamic nature of expertise in a relational context, for example, the case studies (Chapters 5 and 6) demonstrate how the nature of authority is highly variable across the different scenarios and performances presented. Within one day, the vet will perform in a range of situations and contexts and have to draw on different resources of expertise. Relationships are an important aspect of the relational nature of expertise. As the case studies demonstrate, relationships alter between different clients and animals within any given day. The relationship with the farmer/livestock keeper is different to a client with a pet animal because often the farmer/livestock keeper has an extensive knowledge of animal health and disease and is also a significant source

of income to the vet. The *individual* pet owner is not a major source of income and the vet does not expect them to be that knowledgeable in animal health and disease. When the vet is dealing with large-scale pig or poultry units their expertise is limited to legal authority, in that they are the only ones able to issue prescriptions or sign certificates of health.

Parallels with human medicine: critical reflections

Throughout this thesis there has been recourse to parallels with human medical expertise, perhaps with little critical reflection. The extent to which veterinary expertise is the 'same' as that of human medical expertise is important to consider, particularly in the context of farming. Aesculapian authority is far harder to apply to vets than doctors. As this thesis has argued, Aesculapian authority is a human construct and vets have used it as a means of developing their expertise and establishing their authority. The frequent references and comparisons to the human medical profession within the thesis are made because vets themselves constantly compare and make reference to this profession making it impossible to ignore. Aesculapian authority can be fairly easily applied to small animal medicine and large animals like horses where an animal is valued in itself as an individual and treated accordingly. The same cannot be said of food animals which have an economic value as a unit of production. The food animal has limited if any social, cultural and sentimental value when compared to the small animal. The food animal is rarely considered as an individual, let alone a family member, instead they are one of many of a herd. Thus the many complex elements of Aesculapian authority when looking from a human medical perspective do not sit easily with food animal practice. Regarding industrial farming, such as pigs and poultry, it would be extremely inappropriate to apply aspects of Aesculapian authority to this area of practice. In the industrial situation the vet's role is limited to the prescribing of drugs, certification of disease absence or infection control. If we accept that the fundamental aspect of Aesculapian authority is healing – to heal the sick – how can this apply to a 10,000 head pig unit? There are then limitations to the applicability of Aesculapian authority for understanding veterinary expertise, particularly in the food animal sector.

The role of path dependency in the institutionalisation of veterinary expertise

The thesis has revealed the role of path dependency in the institutionalisation of veterinary expertise i.e. how the decisions currently faced by the veterinary profession are limited by past decisions even though past decisions may no longer be relevant. The UK veterinary profession is an invention of the Enlightenment - and returning to the parallels with human medicine - it has looked to the medical profession from its beginnings (see Fisher, 1993, 1998), Pattison, 1984, Pugh, 1962). The original veterinary educators and examiners were doctors and they applied their values and moral codes to the embryonic veterinary profession. Vets have continuously aped the medical profession and this is particularly apparent in their institutional and regulatory mechanisms such as the formation of a Royal College, the British Veterinary Association and the professional personal standards that vets are expected to adhere to. The medical profession has a long history and tradition stretching back millennia and the vet profession tried in the early days to replicate the tradition. It is this that has led to a path dependency in that the vets had created a non-history and non-tradition borrowing heavily from human medicine. By attempting to create a history and tradition that did not really exist they started from a weak and subordinate position, especially compared to older professions such as medicine and law. Starting from a sense of inferiority has done vets few favours and has led to the profession looking backwards to a non-history and tradition to constantly justify their position and authority on animal matters. Looking backwards has served to restrict veterinary development and vets have remained conservative and almost reactionary. This is especially apparent in the context of specialisation which has recently (2011) become a focus for assessment within the profession. To me it appears that vets look backwards rather than forwards and when their authority and expertise is questioned or challenged they fall back on this non-history and tradition and their legal authority to treat sick animal as enshrined in the Royal Charter and the Veterinary Surgeons Act

(1966) – though this is now being reviewed and renamed the Veterinary *Services* Act - as a means of defending their position

The principal drivers of change in the veterinary professions

Three principal drivers of change in the veterinary profession can be identified and these are structural, scientific and societal and we look at each in turn.

Structural: The fundamental driver of the veterinary profession and changes in its practice is and has been government. The RCVS and BVA are much weaker drivers in comparison. To justify this statement, with the example of specialisation, it was only when the Thatcher government – and the neoliberal policies of that government – came to power that veterinary specialisation was 'allowed' by the Royal College. Neoliberalism was the driver of veterinary specialisation. Also, during the height of the BSE crisis the government was in control and the veterinary profession was sidelined and largely ignored. Changes in animal health relating to public health and wellbeing came through other scientists and the medical profession not the veterinary profession. The vets were instructed to carry out government policy. Again in 2001, with the FMD crisis, the vets we largely ignored by government, to the point when even the media spoke to human virologists rather than veterinary scientists. History also provides examples, when government policy during the productivist years related to milk production said that vets should do XXX.

The role of the Royal College, if I can use similes, is like that of local government – with some power locally- but ultimately responsible for carrying out national government agendas. Or like a Sergeant Major who has 'appointed' power but even the most junior officer can out-rank it. The government if they wanted can take away the [RCVS] Royal Charter; dictate what vets can and cannot do. The BVA are in a slightly stronger position for changing practices, simply because they are more market focused and recognise the inherent weakness of the Royal College and at times challenge their authority for

example the formation of 'specialist' groups within the BVA when the official RCVS policy was not to allow or recognise veterinary specialisation.

Scientific: Advances in science and technology can exert opportunities and pressures on the veterinary profession. New medicines and techniques have allowed veterinary expertise to expand. However, such can be the extent of technical and scientific advances (within *and* outside the profession e.g. human medicine, animal science, pharmaceuticals etc) that it becomes beyond the scope of a generalist and drives specialisation in the form of requiring extra/specialist training. These advances can create opportunities for veterinary specialisation and - because they operate in a free market – the specialist technician (i.e. non-vet/paraprofessional) because no one person can hold the expanding knowledge's and expertise required. Thus advances in science and technology are often at the expense of the professional generalist. Areas that were once the generalist domain can move out of the profession and lead to de-skilling of the vet. Examples here, from the farm sector, include CT scanning and equine dentistry.

Societal: Societies expectations of vets have grown over recent decades and this is possibly more apparent in the pet sector than the food sector. Veterinary consumers in the pet sector are growing ever more sophisticated and demanding of interventions and expect them to be more akin to medical models. The internet has enabled consumers to access a wealth of information – though the accuracy and quality of information on some sites is debateable.

AND FINALLY……..if I where to speak to the presidents of the RCVS and BVA this is what I would say:

"Look to the future not the past. Don't fall back on a tradition or history that never was and don't rely on Government to underwrite your authority. You are not doctors, you are veterinarians, be proud of this fact. You are a singular and unique profession and as such you are quite capable of self determination. So stop following medicines lead. In this era

of the “Big Society” you have many skills and talents that others can learn from, particularly medicine. They should be looking to you in how to sell and contract services to an ever increasingly sophisticated and demanding market”.

References

Abramowitz, M. Malcolm, P. (1996) Technological Change, Intangible Investments and Growth in the Knowledge – Based Economy: The US Historical Experience in Foray, D. Lundvall, B.A. (eds) *Employment and growth in the knowledge based economy* OECD Paris, pp 25-60

Adams, C. Conlon, P. Long, K., (2004) Professional and veterinary competencies: addressing human relations and the human-animal bond in veterinary medicine, *Journal of Veterinary Medicine and Education*, 31(1): 67-72

Amin, A & Cohendet, P. (2004) *Architectures of knowledge: firms, capabilities and communities*, Oxford University Press

Amirault, R., Branson, R., (2006) Educators and expertise: a brief history of theories and models. In Ericsson et al (eds) *The Cambridge Handbook of Expertise and Expert Performance*, Cambridge University Press, Cambridge, pp 69-86

Anders Ericsson, K. A., (2006) An Introduction to Cambridge Handbook of Expertise and Expert Performance: Its Development, Organization and Content, in Ericsson, K. A., et al (eds.) *The Cambridge Handbook of Expertise and Expert Performance*, Cambridge: Cambridge University Press, p.3-19.

Arrizabalaga, J., Henderson, J. & French, R. 1997 *The great pox: The French Disease in Renaissance Europe*, Yale University Press, New Haven, CT

Armstrong, J., (2009) Aesculapian authority: understanding the authority and expertise of physicians and veterinarians, *Animal Welfare Science, Law and Ethics Veterinary Association Journal*, 13(2):6-7

Atkinson, P. (1997). Narrative turn or blind alley? *Qualitative Health Research*, *7*: 325-344.

Atkinson, P. Coffey, A. Delamont, S. Lofland, J. Lofland, L. (2001) *Handbook of ethnography*, Sage, London

Atkinson, P. Hammersley, M. (2007) (3rd edn) *Ethnography: principles in practice*, Routledge, Abingdon, Oxon

Bar Council (2007) www.barcouncil.org.uk/ accessed 17/11/07

Bar Standards Board (2007) www.barstandardsboard.org.uk/ accessed 17/11/07

Barton, J, (2009) (7th edn) *Veterinary School*, Trotman Publishing.

Behar, R. (1997). *The vulnerable observer: Anthropology that breaks your heart*. Boston: Beacon.

Bennet, K., Carroll, T., Lowe, P., Phillipson, J., (2002) (eds) *Coping with crisis in Cumbria: the consequences of foot and mouth disease*, Centre for Rural Economy (CRE) report, Newcastle University, UK

Bennett P, (1999), Understanding responses to risk: some basic findings, in P Bennett, K Calman (eds) *Risk Communication and Public Health*, Oxford University Press, Oxford pp 3-19

Bevir, M. Rhodes, R.A.W. (2003) *Interpreting British Governance*, Routledge, London

Bickerstaff, K. and P. Simmons (2004) 'The right tool for the job? Modelling, spatial relationships and styles of scientific practice in the UK foot and mouth crisis', *Environment and Planning D: Society and Space,* 22:393-412

Blackler, F. (2002) Knowledge, Knowledge Work and Organisations. In Choo,C.W. & Bontis,N. (eds) *The strategic management of intellectual capital and organizational knowledge*. Oxford University Press.

Blumhagen, D., W., (1979) The doctor's white coat: the image of the physican in modern *America, Annals of Internal Medicine*, 91(1): 111-116

Boshuizen, H. P. A., Bromme, R., Gruber, H., (2004) *Professional learning: gaps and transition on the way from novice to expert*, Kluwer Academic Publishers, London

Bourdieu, P., (1982) *Language and symbolic power*, Harvard University Press, Cambridge, Massachusetts

Bridges-Webb,C. (1986) What the General Practitioner does: Morbidity in General Practice. in Anderson et al (eds*) General Practice in Australia*. Sydney University Press pp 32-37.

Briggle, A., (2008) Review: Questioning expertise, *Social Studies of Science* 38(3): 461-475

BVA Specialist Division (2008) http://www.bva.co.uk/profession/divisions/specialist.asp accessed 21/01/08

BVA (2008) Territorial Division http://www.bva.co.uk/profession/divisions/territorial.asp accessed 21/01/08

British Veterinary Poultry Association (BVPA) (2008) www.bvpa.org.uk accessed 21/01/08

Brown J, (1989), Introduction: approaches, tools and methods', in *Environmental Threats: Perception, Analysis and Management* Ed. J Brown, Belhaven Press, London, pp 1 -18

Brown P, Kroll-Smith S, Gunter V J, (2000), Knowledge, citizens, and organizations: an overview of environments, diseases, and social conflict", in S Kroll-Smith, P Brown,V J Gunter (eds) *Illness and the Environment: A Reader in Contested Medicine*, New York University Press, New York, pp 9 -25

Buller, H., Morris, C., (2003) Farm animal welfare: a new repertoire of nature-society relations or modernism re-embedded? *Sociologia Ruralis*, 43(3): 216-237

Bullock, F. (1943). Correspondence, *Veterinary Record*, 55: 240.

Burgess J, Clark J, Harrison C, (2000), Knowledges in action: an actor network analysis of a wetland agri-environment scheme, *Ecological Economics* 35: 119 - 132

Callicott, J., B., (1980) Animal liberation: a triangular affair, *Environmental Ethics*, 2: 311-38

Camp van der, K., Vernooij-Dassen, M. J. F. J., Grol, R. P. T. M., Bottema, B. J. A. M. (2004) How to conceptualise professionalism: a qualitative study, *Medical teacher* 26 (8): 696-702

Carey, S. M., Cosgrove, J.F., (2006) Cultural issues surrounding end-of-life care, *Current Anaesthesia and Critical Care*, 17:263-270

Charon, R., (2001) Narrative medicine: a model for empathy, reflection, profession, and trust, *Journal of American Medical Association*, 15(286): 1897-1902

Collins, R., (1986) *Weberian sociological theory*, Cambridge University Press, Cambridge

Collins, H.M. and Evans, R. (2002) The Third Wave of Science Studies: studies of expertise and experience, *Social Studies of Science*, 32(2): 235-296.

Cook, I., Crang, M., (1995) *Doing ethnographies*, Environmental Publications, Norwich

Dear, M., Wolch, J., (1987) *Landscapes of despair: from deinstitutionalization to homelessness*, Polity Press, Cambridge

DeLanda, M., (2006) *A new philosophy of society: assemblage theory and social complexity*, Continuum, London and New York

Department of Environment Food and Rural Affairs (DEFRA) (2003) www.defra.gov.uk/animalh/ahws/default.htm accessed 21/01/08

DEFRA (2007) *Careers in Defra*
http://www.defra.gov.uk/corporate/recruit/ps1.pdf accessed 17/11/07

Denscombe, M., (2003) (2nd edn) *The good research guide for small-scale social research projects*, Open University Press, Maidenhead, Berkshire

Dent, M., Whitehead, S., (2002) Introduction: Configuring the 'new' professional. In Dent, M., Whitehead, S., (eds) *Managing professional identities: knowledge, performativity and the 'new' professional*, Routledge, London, pp 1-16

Denzin, N. K. (1992). The many faces of emotionality. In C. Ellis (Ed.), *Investigating subjectivity: Research on lived experience*, London: Sage, pp 17-30

Denzin, N. K. (1997). *Interpretive ethnography: Ethnographic practices for the 21st century*, London: Sage.

Derkzen, P., Bock, B., (2007) The construction of professional identity: symbolic power in rural partnerships in the Netherlands, *Sociologia Ruralis* 47(3): 189-204

Dickens, P., (1992) *Society and nature*, Wheatsheaf harvester, Hemel Hempstead

Dickens, P., (1996a) *Reconstructing nature: alienation, emancipation and the division of labour*, Routledge, London

Dickens, P., (1996b) Capitalism, nature and modernity: a realist perspective. In Ester, P., Schluchter, W., (eds) *Social dimensions of environmental issues: international perspectives*, Tilburg University Press, Tilburg, pp 15-33

Drury,M. Hull,R. (1979) *Introduction to General Practice*. Cassell, London

Dunn,C. Crowley,P. Bush,J. Pless-Mulloli, T. Mckinney,P.A. (2008) Expertise and scientific uncertainty: Understanding trust amongst professional stakeholders in environment and health. *Environment and Planning A* 40: 696-714

Earle, T.C. Siegert, M., (2006) Morality information, performance information and the distinction between trust and confidence, *Journal of Applied Social Psychology*, 36(2): 383-416

Ellis, C. (1997). Evocative autoethnography: Writing emotionally about our lives. In W. G. Tierney & Y. S. Lincoln (Eds.), *Representation and the text*, New York: State University of New York Press, pp 115-139

Ellis, C. Bochner, A. P. (eds.) (1996). *Composing ethnography: Alternative forms of qualitative writing*. Walnut Creek, CA: Alta Mira Press.

Ellis, C., Bochner, A. P. (2000). Autoethnography, personal narrative, reflexivity. In N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd edn) Thousand Oaks, CA: Sage, pp 733-768

Environment, Food and Rural Affairs Committee (EFRA) (2003) *Vets and veterinary services, sixteenth report of session 2002-2003*, House of Commons, London

Enticott, G. and Franklin, A. (2009) Biosecurity, expertise and the institutional void: the case of bovine tuberculosis, *Sociologia Ruralis*, 49(4): 375-93

Ericsson, K.A., Charness, N., Feltovich, P., Hoffman, R.R., (2006) (eds) *The Cambridge Handbook of Expertise and Expert Performance*, Cambridge University Press, Cambridge

Evetts, J., (2003) The construction of professionalism in new and existing occupational contexts: promoting and facilitating occupational change, *International Journal of Sociology and Social Policy*, 23:4/5:22-35

Feltovich, J.P, Ford, K.M., Hoffman, R.R., (1997) (eds) *Expertise in context: human and machine*. Cambridge, MA

Ferry, L., (1995) *The new ecological order*, University of Chicago Press, Chicago

Fischer, F., (2005) *Citizens, experts and the Environment*, Duke University Press, Durham/London

Fischer-Rosenthal, W. (2000) Biographical work and biographical structuring in present-day societies. In: Chamberlayne, P., Bornat, J., Wengraf, T. (eds.): *The Turn to Biographical Methods in Social Science*, Routledge, London – New York

Fisher, J., (1993) Not quite a profession: the aspirations of Veterinary Surgeons in England in the mid nineteenth century, *Historical Research* 66:284-302

Fisher, J. R., (1998) 'Cattle Plagues Past and Present: The Mystery of Mad Cow Disease' *Journal of Contemporary History* 33:215-28

Flyvberg, B., (2006) Five misunderstandings about case study research, *Qualitative Inquiry* 12(2): 219-245

Frankel, R. M., (2006) Pets, vets and frets: what relationship-centred care research has to offer veterinary medicine, *Journal of Veterinary Medical Education*, 33(1): 20-7

French, R. (2003) *Medicine before Science: The business of medicine from the middle ages to the enlightenment*, Cambridge University Press.

Frewer L J, (1999), Public risk perceptions and risk communication", in P Bennett, K Calman (eds) *Risk Communication and Public Health*, Oxford University Press, Oxford, pp 20- 32

Fulton, Lord (1968) *The Civil Service: Report of the Committee of Enquiry into the Civil Service 1966-68*, Cmnd 3638, HMSO, London

Gardiner, A., *Small animal practice in British veterinary medicine, 1920-1956*, unpublished PhD thesis, University of Manchester

Gefen, D. (2000) E-commerce: the role of familiarity and trust. *The International Journal of Management Science*, 28:725-737

General Dental Council (GDC) (2007) www.gdc-org/uk accessed 17/11/07

General Medical Council (GMC) (2007) www.gmc-org/register/uk accessed 17/11/07

Gentzler, J. (1995) How to discriminate between experts and frauds: Some problems for Socratic Peirastic, *History of Philosophy Quarterly* 3: 227-46.

Gerardi, S., Nicolini, D., Odella, F., (1998) Toward a social understanding of how people learn in organisations, *Management Learning*, 29: 273-297

Germain, M.L. (2006) What experts are not: Factors identified by managers as disqualifiers for selecting subordinates for expert team membership: *Academy of Human Resource Development* Conference Paper. Columbus Ohio February 22-26

Giffin, K. (1967)The contribution of studies of source credibility to a theory of interpersonal trust in the communication process. *Psychological Bulletin*, 68(2):104-120

Goffman, E., (1959) *The Presentation of Self in Everyday Life*, Doubleday Anchor, New York

Goffman, E., (1961) *Asylums*, Doubleday Anchor, New York

Goffman, E., (1964) *Stigma: Notes on the Management of Spoiled Identity*, Prentice-Hall, Englewood Cliffs, NJ

Goffman, E. (1972) 'Symbols of class status', in H. R. Stub (cd.) *Status Cummunities in Modern Society*, Hinsdale, IL.

Goffman, E., (1974) *Frame Analysis: An Essay on the Organisation of Experience*, Harper and Row, NewYork

Goffman, E., (1981) *Forms of Talk*, Basil Blackwell, Oxford

Goldman, A.I., (2001) Experts: Which ones should you trust? *Philosophy and Phenomenological Research*, 63(1): 85-110

Gonzalez, J. J., Benito, C. G., (2001) Profession and identity: the case of the farming family in Spain, *Sociologia Ruralis* 41(3): 343-357.

Goodall, Jr., H. L. (1998, November). *Notes for the autoethnography and autobiography Panel NCA*.A paper presented at the National Communication Association Convention in New York City.

Great Britain, Parliament (1948) Second reading, Veterinary Surgeons Bill. Hansard, HC, Series 5, 451, cols.1498–1546, HMSO, London

Hammond, J., & Hunter-Smith, J. (1942–1943). Winter milk production, *Journal of the Ministry of Agriculture*, 49: 3–8.

Hansen, M. T., Nohria, N., and Tierney, T. (1999). What's your Strategy for Managing Knowledge? *Harvard Business Review*, 77(2), 106-116.

Hardy, A., (2002) Pioneers in the Victorian provinces: veterinarians, public health and the urban animal economy, *Urban History* 29(3): 372-387

Hardy, A. (2003). Professional advantage and public health: British veterinarians and state veterinary services, 1865–1939, *Twentieth Century British History*, 14: 1–23.

Holger-Maehle, A., (2009) *Doctors, honour and the law: medical ethics in Imperial Germany*, Palgrave MacMillan, Basingstoke

Holt, N. L. (2003). Representation, legitimation, and autoethnography: An autoethnographic writing story. *International Journal of Qualitative Methods, 2*(1), Article 2.

House of Lords, (2000) *Science and Society Committee on Science and Technology*, The Stationery Office, London

Howell, P., (2002) A place for the animal dead: pets, pet cemeteries and animal ethics in late Victorian Britain, *Ethics, Place and Environment*, 5(1):5-22

Hudson,R.(2005) *Economic Geographies*. Sage, London

Institution of Employment Studies (IES) (2003) *Workforce modelling revisited. A report for the RCVS*

www.rcvs.org.uk/shared_asp_files/uploadedfiles/{CCE4AA35-E1A34A5A-9796-31B5934E2827}_iesreport.pdf accessed 21/01/08

IES (2004) *Veterinary career choices*, IES, Brighton

Jasanoff, S. (2003) Accounting for expertise, *Science and Public Policy*, 30 (3), p. 157-162.

Johnson, S.R., (2003) Aesculapian authority, 24/7 and you, Whitecoat Ceremony Keynote Address, University of Iowa http://www.medicine.uiowa.edu/osac/programsrecords/whitecoat/wcc_keyadd03.htm accessed 17/01/09

Kothari B, (2002), Theoretical streams in marginalized peoples' knowledge(s): systems, asystems, and subaltern knowledge(s) *Agriculture and Human Values* 19: 225 – 237

LaBarge, S. (1997) Socrates and the Recognition of Experts, in M. McPherran, ed., *Wisdom, Ignorance and Virtue: New Essays in Socratic Studies*, Academic Printing and Publishing, Edmonton

Latour, B., (2005) *Reassembling the social: an introduction to actor-network-theory*, Oxford University Press, Oxford

Lave,J. & Wenger,E.(1991) *Situated learning: Legitimate Peripheral Participation* . Cambridge University Press. New York

Law Society (2007) www.lawsociety.org/uk accessed 17/11/07

Leach, M., Scoones, I. Wynne, B. (2005) (eds) *Science and Citizens*, Zed Books London.

Lesser, E., L., Storck, J., (2001) Communities of Practice and organisational performance, *IBM Systems Journal* 40: 831-841

Lewis, R. Dixon, J. (2004) Rethinking management of chronic diseases. *British Medical Journal*; 328:220-22

Lovenheim, P., (2003) *Portrait of a burger as a young calf: the story of one man, two cows and the feeding of a nation*, Three Rivers Press, New York

Lowe, P., (2009) (The Lowe Report) *Unlocking the potential: a report on veterinary expertise in food animal production*, A report to the Vets and Veterinary Services Steering Group, DEFRA, London

Lowe, P., Murdoch J., Norton, A., (2001) *Professionals and volunteers in the environmental policy process*, Centre for Rural Economy, University of Newcastle, Newcastle

Luhmann, N., (1979) *Trust and power*, Wiley, Chichester

Lundvall, B.A. & Johnson,B. (1994) The Learning Economy: *Journal of Industry Studies*. 1/2: 23-41

Mackintosh, J. (1941–1942) Breeding and rearing to maintain the milk supply, *Journal of the Ministry of Agriculture*, 48: 151–155

Mancini. P., (1999) New frontiers in political professionalism, *Political Communication* 16(3): 231-245

Martin, J., (2000) *The development of modern agriculture: British farming since 1931*, MacMillan, Basingstoke

Mieg, H.A. (2006) Social and Sociological Factors in the Development of Expertise, in Anders Ericsson, K. et al (eds.) *The Cambridge Handbook of Expertise and Expert Performance*, Cambridge: Cambridge University Press, p. 743-760.

Miller, H., (1995) *The presentation of self in electronic life: Goffman on the internet*, Paper presented at Embodied Knowledge and Virtual Space Conference Goldsmiths' College, University of London, June 1995

Ministry of Agriculture Food and Fisheries (1965) *Animal Health. A Century History, 1865-1965* London

Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation, *Organization Science*, 5(1), 14.

Nonaka, I. & Takeuchi,H. (1995) *The Knowledge-creating company: How the Japanese companies create the dynamic innovation*. Oxford University Press.

Nowotny, H., Scott, P., Gibbons, M., (2001) *Re-thinking science*, Polity Press, Cambridge

Orem, D. E., (1979/2004) *Concept Formalization in Nursing: Process and Product*, reprint by International Orem Society (IOS)

Orem, D. E., (2001) (6th edn) Nursing*: Concepts of Practice***,** C. V. Mosby

Organisation Consulting Partnership (OCP) (2004) *Working group on vets and veterinary services*, final report, OCP, London

Ouédraogo, A., Le Neindre, P., (1999) *L'Homme et l'aniaml: un débat de sociéte*, INRA Editions, Paris

Palmer, C., (1995) *Animal liberation, environmental ethics and domestication*, OCEEES Research Paper No 1, Mansfield College, Oxford

Paterson, T., T. (1957) Notes on Aesculapian authority, unpublished manuscript cited in Siegler, M., Osmond, H., (1974) *Models of madness, models of medicine*, Harper Colophon, New York

Pattison, I., (1984) *The British veterinary profession, 1791-194*8, J. A. Allen, London

Pemberton, N., Warboys, M., (2007) *Mad dogs and Englishmen: rabies in Britain, 1830-2000*, Palgrave MacMillan, Basingstoke

Peters, R.G., Covello, V.T., McCallum, D.B., (1997) The determinants of trust and credibility in environmental risk communication,: an empirical study, *Risk Analysis*, 17: 43-54

Phillipson, J., Liddon, A., (2007) *Common knowledge? An exploration of knowledge transfer*, Rural Economy and Land Use Programme Briefing Series No 6, June

Piterman, L., Koritas, S., (2005) General practitoner – specialist relationship, *Internal Medicine Journal* 35: 430-434

Pig Veterinary Society (PVS) (2008) www.pigvetsoc.org.uk accessed 21/01/08

Polanyi, M., (1958) *Personal Knowledge: Towards a Post Critical Philosophy*, Routledge, London

Polanyi, M., (1967) *The Tacit Dimension*, Anchor Books New York
Porter, R., (2000) *Enlightenment: Britain and the creation of the modern world*, Penguin, London

Pugh, L..P. (1962) *From Farriery to Veterinary Medicine*, W, Heffer & Sons Cambridge.

Rehman, S.U., Nieterk, P.J., Cope, D.W., Kilpatrick, A.D., (2005) What to wear today? Effect of the doctor's attire on the trust and confidence of patients, *American Journal of Medicine*, 118(11):1279-1286

Richards, D., (2007) Elite interviewing: approaches and pitfalls, *Politics*, 16(3): 199-204

Riley, M., (2008) Experts in their fields: farmer-expert knowledges and environmentally friendly practices, *Environment and Planning A, 40*: 1277-1293

Ritvo, H., (1987) *The animal estate: the English and other creatures in the Victorian Age*, Harvard University Press, Cambridge, Mass

Rollin, B. E., (1984) The moral status of animals. In Kay, W. J., Nieburg, H. A., Kutscher, A. H., Macdonald, R. M. and Fudin, C. E. (eds) *Pet Loss and Human Bereavement*, Iowa State University Press, Ames, IA, pp 3–15

Rollin, B. E., (1996) (1st edn) *An introduction to veterinary medical ethics: theory and causes*, Iowa State University Press

Rollin, B. E., (2002) The use and abuse of Aesculapian authority in veterinary medicine, *JAVMA*, 220 (8): 1144-1149

Rollin, B. E., (2006) (2nd edn) *An introduction to veterinary medical ethics: theory and causes*, Blackwell Publishing, Iowa, US

Rolston, H., (1994) *Conserving natural value*, Columbia University press, New York

Ronai, C. R. (1992). The reflexive self through narrative: Anight in the life of an erotic dancer/researcher. In C. Ellis & M. G. Flaherty (Eds.), *Investigating subjectivity: Research on lived experience*, Thousand Oaks, CA: Sage, pp 102-124

Royal Army Veterinary Corps (RAVC) (2009) History: 200 years of history. www.army.mod.gov.uk accessed 05/10/09

Royal College of Veterinary Surgeons (RCVS) (1980) *Annual Report*, RCVS, London

RCVS (1982) *Annual Report*, RCVS, London

RCVS *Manpower Surveys* (1998, 2000, 2002 and 2006)

www.rcvs.org.uk/Templates/Internal.asp?NodeID=90191 accessed 21/01/08

RCVS (1998, 2000, 2002) *Manpower Surveys* http://www.rcvs.org.uk/Templates/Internal.asp?NodeID=90191&int1stParentNodeID=89654&int2ndParentNodeID=89981 accessed 17/11/07

RCVS (2001) *Veterinary education and training: a framework for 2010 and beyond*, RCVS, London http://www.rcvs.org.uk/shared_asp_files/uploadedfiles/%7BF21F2A8E-5E16-4C56-AA4D-0B63775B9034%7D_esg_consultation.PDF accessed 17/11/07

RCVS (2002) *Education Strategy Steering Group*, RCVS,London.

RCVS (2006) *Survey of the Profession* http://www.rcvs.org.uk/Templates/Internal.asp?NodeID=90191&int1stParentNodeID=89654&int2ndParentNodeID=89981 accessed 17/11/07

RCVS (2007) *Careers as a veterinary surgeon* http://www.rcvs.org.uk/Templates/Internal.asp?NodeID=90334&int1stParentNodeID=89658#careersopp accessed 17/11/07

RCVS (2007) *Modular Certificates* www.rcvs.org.uk accessed 02/07/07

RCVS (2008a) www.rcvs.org.uk accessed 21/01/08

RCVS (2008b) *RCVS Recognised specialists: information and application pack*, February, edition 1, RCVS, London

RCVS (2010) *The RCVS Survey 2010 of the UK veterinary and veterinary nursing professions*, Institute for Employment Studies, Brighton

Royal Society for the Protection of Animal (RSPCA) (2010) *CCTV for all UK abattoirs* http://www.rspca.org.uk/media/news/story/-/article/EM_CCTV_for_all_UK_abattoirs_Feb10 accessed 23/3/10

Serpell, J., (1986) *In the company of animals*, Blackwell, Oxford

Siegler, M., Osmond, H., (1974) *Models of madness, models of medicine*, Harper Colophon, New York

Smelser, N.J. (1962) *The theory of collective behaviour*, Routledge and Kegan Archie, London

Smith, F. (1887) *A manual of veterinary hygiene*, London

Solicitors Regulation Authority (SRA) (2007) www.sra.org.uk/ accessed 17/11/07.

Sparkes, A. C. (2000). Autoethnography and narratives of self: Reflections on criteria in action. *Sociology of Sport Journal*, *17*: 21-43.

Spender,J.C. (1997) Making Knowledge the Basis of a Dynamic Theory of the Firm . *Strategic Management Journal* 17: 45-62

Spry, T. (2001) Performing autoethnography: an embodied methodological praxis, *Qualitative Inquiry*, 7(6): 706-732

Strasser,R.(1991) General Practice, what is it ? *Medical Journal of Australia* 155:533-4

Survey Committee. (1940). Report. Veterinary Record, 52(Suppl.), 41.

Swabe, J., (1999) *Animals, disease and human society: human animal relations and the rise of veterinary medicine*, Routledge, London

Swabe, J., (2000) Veterinary dilemmas: ambiguity and ambivalence in human animal interaction. In Podberscek, A., Archie, E., Serpell, J., (eds) *Exploring the relationship between people and pets,* Cambridge University Press, Cambridge, pp 292-312

Tansey, O., (2006) Process tracing and elite interviewing: a case for non-probability sampling, http://www.nuffield.ox.ac.uk/politics/papers/2006/tansey.pdf
accessed 02/09/10

Tovey, H., (2003) Theorising nature and society in sociology: the invisibility of animals, *Sociologia Ruralis,* 43(3): 196-215

Turner, S.P. (2003) *Liberal Democracy* 3.0 SAGE, London.

Turner, S. (2001) What is the Problem with Experts?, *Social Studies of Science,* 31(1), p.123-149.

Van Doren, C., (1991) *The history of knowledge: past, present and future*, Valentine B

Wagner, E.H. (2004) Chronic disease care, *British Medical Journal*, 328:177-8

Wall, S. (2006) An autoethnography on learning about autoethnography, *International Journal of Qualitative Methods*, 5(2): 146-160

Walls J, Pidgeon N,Weyman A, Horlick-JonesT, (2004), Critical trust: understanding lay perceptions of health and safety risk regulation *Health, Risk and Society* 6: 133 -150

Wang, Y.D., Emurian, H.H. (2005) An overview of online trust: Concepts, elements, and implications. *Computers in Human Behavior*, 21:105-125.

Wear, D., (1998) On white coats and professional development: the formal and the hidden curricula, *Annals of Internal Medicine*, 129(9): 734-737

Weber, M. (1958). "The three types of legitimate rule". *Berkeley Publications in Society and Institutions,* 4 (1): 1-11. Translated by Hans Gerth.

Weber, M., (1964) *The theory of social and economic organization*, Free Press of Glencoe, New York

Weisz, G**. (**2003) The Emergence of Medical Specialization in the Nineteenth Century *Bulletin of the History of Medicine*, 77: 3. 536-574

Wenger, E. C., (2000) Communities of Practice and social learning systems, *Organisation* 7: 225-246

Westley Consulting (2004) *Large animal vets: a report to DEFRA*, Westley Consulting

Wilkie, R., (2010) *Livestock/deadstock: working with farm animals from birth to slaughter*, Temple University Press, Pennsyvania

Wilkinson, K. (2007) '*Evidence Based Policy and the Politics of Expertise: A Case Study of Bovine Tuberculosis*', Centre for Rural Economy Discussion Paper Series No.12, University of Newcastle

Will, A., J., Levitt, R.,E., (2008) *Mobilising knowledge for international projects*, Working Paper 37, Collaboratory for Research on Global Projects, Stanford University, US

Wilson, G. (2006) Beyond the Technocrat? The Professional expert in Development *Practice, Development and Change* 37(3): 501-523.

Woods, A. (2004) *A Manufactured Plague: The History of Foot and Mouth Disease in Britain*, Earthscan, London

Woods, A. (2007) The farm as clinic: Veterinary expertise and the transformation of dairy farming, 1930-50, *Studies in History and Philosophy of Biological and Biomedical Sciences* 38: 462-487