UNIVERSITY OF NOTTINGHAM

Veterinary donation

To what extent can the ethical justifications for living human donation be applied to living animal donation?

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ABSTRACT

This thesis develops the scant existing literature which explores the ethical justifications for living animal donation in the veterinary setting and contributes to the considerable research on social and ethical aspects of human living donation. The work argues that whilst some justifications for human living donation are not-transferable, others may be adapted and applied to the veterinary setting. The unique social context of veterinary donation is analysed, using novel empirical analysis to refine and contextualize the ethical arguments made. The research methods entail an innovative comparative ethical analysis and a qualitative empirical study which are integrated using an empirical bioethics approach.

The main justificatory arguments for human living donation are identified as informed consent and donor best interest. These arguments stem from a human's acknowledged rights to bodily integrity and the human medical professional's duty not to harm their patients. The reduced capacity of animal donors means that donor consent arguments are not directly transferable to the veterinary setting and an animal owner's informed consent is shown to have reduced moral authority. Whilst animal donors may lack comparable bodily rights, veterinary living donation practices can conflict with a veterinary surgeon's professional obligations. A comparable justification for living animal donation is argued to exist only when the procedure is in the donor animal's best interest.

An empirical analysis of canine blood donation to a UK animal blood bank develops understanding of the social context of living animal donation. The analysis indicates that animal owners may not always be motivated by the best interest of donor animals; furthermore, consistent themes such as trust, optimism and human-animal comparisons have implications for the quality of a donor owner's consent. These ethical and empirical findings are used to construct an ethical framework for living animal donation with detailed

provisions for owner consent, donor best interest, donor harm and benefit, recipient benefit, fairness and transparency. The ethical framework is used to argue for the development of regulatory approaches to companion animal blood banking and feline renal transplantation in the UK. The work also has wider implications for veterinary ethics, veterinary policy and the social and ethical understanding of human living donation.

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Declaration

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Some parts of Chapter 2 (methodology), empirical Chapters 5 and 6 and concluding Chapter 8 are taken from or adapted from a co-authored publication:
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1. INTRODUCTION

This thesis examines the ethical justification for using animals as living donors in the veterinary setting. The study explores the ethical justifications which support comparable human living donation practices and considers whether, or to what extent, they may be applied to living animal donations. The different social context of living animal donation is explored in order to refine and contextualise the comparative ethical arguments which are made. An ethical framework is constructed for living animal donation decision making and is used to examine and critique current regulatory approaches to living animal donation in the UK.

In Chapter 1 contemporary veterinary practice is explored; highlighting both the rapid technological advancement and shared professional learning which are shaping modern veterinary practices. The first section outlines current living donation practices in human medicine and veterinary medicine contexts and highlights both similarities and differences between the development, application and organisation of clinical approaches to donation by the two professions. The sizeable academic field of medical ethics and the considerable academic literature addressing human donation ethics is then contrasted with the developing field of veterinary ethics and the limited existing work which is focused on veterinary donation ethics. It is argued that ethical tensions and questions relating to veterinary donation practices are identifiable through professional dialogue, media coverage and changing regulatory approaches. A similar situation is also identified within the field of social science where medical sociology and the sociology of human donation are shown to contrast markedly with the embryonic field of veterinary sociology which has yet to consider the social context of veterinary donation. Again, media and social media coverage are used to illustrate some fascinating but unexplored social attitudes to animal donation.

Building on the introductory framing of this work, the specific research questions which it addresses are defined, the research approach is outlined and the structure of the thesis is described.

1.1 Contemporary veterinary medicine

The broad context within which this study sits is one of veterinary technological advancement. Many modern day veterinary practices now offer animal diagnostic services and treatments which only a decade ago were unheard of such as MRI scanning and radiotherapy (Davis Veterinary Specialists, 2017) and even animal prostheses (Texas A&M, 2017). The profession is changing rapidly and such developments have been considered at least partly to relate to rapid societal changes. The UK British Veterinary Association recently asserted that:

> The veterinary profession has experienced rapid change in the environment within which it operates. Some changes have arisen from within the profession; others have been driven by external factors (VetFutures, 2015:p.8)

Some of the recent changes which have been encountered by the profession in the UK have been argued to include the decline of farming (Hobson-West and Timmons, 2015), feminisation of the veterinary profession (Allen, 2016) and the reframing of veterinary surgeons as specialised companion animal physicians (Hueston, 2016). Taken together, these and other societal and professional changes may explain the rapid recent development of advanced treatments, particularly for companion animals, which until recently were more familiar within human healthcare.

The role of human healthcare practices in advancing innovative animal treatments is very clear. For example, a high profile UK veterinary orthopaedic surgeon reportedly pioneers new treatments for animals by learning from the human medical profession:

> Known as the Bionic Vet for pioneering new surgical techniques from bionic legs to endo-skeletons. Noel is a key member of teaching staff at Surrey, passionate about the cross pollination of ideas and philosophies between veterinary and human medicine. (University of Surrey Website, 2015)

Furthermore, Fitzpatrick reportedly claims that the human medical profession might equally benefit from knowledge gained in the veterinary setting, claiming that:

> "My life's ambition is something called One Medicine ... [veterinary] knowledge should perforate the umbrella of human medicine" (Austin, 2014)

The aim of synchronising human and animal health is not just encountered in the clinical setting but also extends to clinical and biological research through the academic field of veterinary comparative medicine (Lothrop, 1995) and global scientific research such as the One Health Initiative (Momanyi *et al.,* 2016)

This 'cross pollination' of ideas concerning human and animal health is enabled by the physiological similarities between human and non-human mammals. Our shared biology is evidenced by the fact that not so long ago doctors were responsible for treating both human and animal patients (Degeling, 2009) and human physicians are reportedly still involved in the specialised treatment of primates (Guardian, 2016).

The demand for advanced human medical techniques to be applied in particular to companion animals must be considered in the context of the intense relationships which are recognised to exist between humans and their pets (Friedmann and Son, 2009). Recent literature argues that the significance of companion animals to the lives of some humans can resemble that of a human family member (Charles, 2015; Ryan and Ziebland, 2015). In support of such claims, a survey recently conducted by the RSPCA has shown that 29% of

pet owning respondents miss out on time with their family and friends because they do not want their pet to be lonely (Anon, 2014). The human treatment of companion animals appears to extend not only to human healthcare practices being developed for the veterinary treatment of companion animals but also to animal owners administering human treatments to their pets at home including pain relief, diet pills and vitamins (Jorgensen, 2016)

In summary, contemporary veterinary practice is technologically advanced with many aspects of human medicine now being developed for use in animals, particularly companion species. Such practices are enabled by shared mammalian biology but are driven by intense relationships between humans and their pets. The next section describes veterinary donation practices as one such example of recent veterinary technological advancement which draws on developments in human medical practice.

1.2 Living donation in humans and animals

In this section the state of the art of first human and then animal donation is described, highlighting the intertwined development of human and animal living donation practices.

Donation in human medicine

The earliest successful example of biological tissue being transplanted from one living mammal to another was recorded at the Royal Society in 1667, where blood was transfused directly from one dog to another. One to one transfusions between people were performed next followed by the discovery of anticoagulants and blood typing which allowed donated blood to be processed, stored and used more safely. This finally resulted in the creation of a human national blood bank around the time of the First World War (National Blood Service (NBS), 2014a). The donation of blood for use in the clinical treatment of human patients has now become commonplace with the UK National Blood Service collecting 1,900,000 blood donations each year for

processing into blood products which are used in clinical treatment and surgery (NBS, 2017a).

Organ donation is a much younger field as transplantation in humans only became a viable treatment option in the late twentieth century. Experiments conducted in the first half of that century included multiple failed transplants of kidneys, livers, cornea and hearts both between animals and even between animals and humans (Price, 2000). Alexis Carrel was granted a Nobel Prize in 1912 in recognition of his work on vascular suture and the transplantation of blood vessels and organs (Nobelprize.org, 2017). However, the rejection of transplanted tissue was a major obstacle and only the rare opportunity to transplant between identical twins showed much promise. It was not until the advent of effective immunosuppressant drugs that the transplantation of kidneys from deceased donors rapidly expanded in the 1980s (Price, 2000).

Over the past 50 years the frequency and diversity of donation, transplant and transfusion procedures in human medicine has expanded beyond all expectation, becoming a worldwide practice which has greatly enhanced the quality of life of hundreds of thousands of lives. From the simple transfusion of whole blood from one individual to another, human blood services now produce specialist blood products which are traded internationally (WHO, 2010). Transplantation has similarly developed beyond deceased kidney transplants and now makes use of a huge variety of cells, tissues and whole organs, including bone marrow, hearts and lungs and most recently uterus transplants (Williams, 2016). A most notable development in human donation practices is the recent trend towards the use of live donors (WHO, 2010). For example, in 2006, an estimated 27,000 living donor kidney transplants occurred worldwide and constituted 39 per cent of all kidney transplants (Horvat *et al.*, 2009). Furthermore, it has been argued that there is a general move towards greater permissiveness concerning who can become a living donor: *Having begun with identical twins, organs have been taken from genetic relatives, then spouses, then friends, and then strangers.* (Wilkinson, 2011:p.122). Even with regards to the medical suitability of living donors

there appears to be a general relaxation of previously stringent criteria meaning that organs are taken from donors who would have been rejected a few years ago (Textor and Taler, 2008). Alongside donors with medical conditions, children and those unable to consent to donation may also be considered more frequently in the coming years (Wilkinson, 2011; Van-Assche *et al.*, 2014). The use of living non-consenting human donors will be discussed in some detail in Chapter 3.

In summary, human medicine has developed first blood donation and then organ donation from initial animal experiments into successful global healthcare systems. Current trends include the donation and use of an increasing variety of tissues and the identification of a widening pool of suitable living donors. Next, the use of donated animal tissue by the veterinary profession is considered.

Donation in veterinary medicine

The transfusion of blood and blood products is also now a part of modern day veterinary practice, particularly for companion animals such as dogs and cats (Day and Kohn, 2012). In the UK one-to-one transfusion has now progressed to the larger scale production and banking of animal blood products following a legislative amendment in 2005 by the UK professional regulatory body the Royal College of Veterinary Surgeons (RCVS, 2014b). This progression has occurred much more rapidly than it did for humans because discoveries such as anticoagulants and blood typing which were pivotal in developing human blood banking systems have been applied directly to veterinary medicine, with human blood collection and processing equipment now being used by animal blood banks. The use of the term 'donation' in the veterinary setting will be critically explored in Chapters 4, 7 and 8.

In contrast to the clinical similarities between human and animal blood transfusion, there are significant organisational differences between systems for human and veterinary blood banking. The UK veterinary profession now has access to two canine blood banks; one located in greater London that

collects blood only from retired greyhounds (Medivet, 2017) whilst the other, Pet Blood Bank (PBB), is located in the Midlands and has reportedly enlisted 7000 pet dogs and retired greyhounds as donors for blood product production (PBB, 2014a). Empirical Chapters 5 and 6 later explore in some detail the different ways that animal owners construct their decision to offer their dog as a blood donor and it is important here to make clear the different ownership, living conditions and donation arrangements which exist for retired racing greyhounds and 'pet' dog blood donors. Retired racing greyhound in this thesis refers to animals owned by the Retired Greyhound Trust (RGT), a charity who take in and re-home ex-racing dogs that are no longer wanted by their racing trainer. The UK greyhound racing industry has suffered criticism over specific animal welfare concerns, including the fate of unwanted racing dogs (APGAW, 2007). The RGT state that they help to re-home over 4,500 retired racing greyhounds a year, through 60 volunteer-led branches (RGT Website, 2017). Blood donation for these dogs occurs at the RGT kennels where a number of animals are offered by the kennel owner for donation during a visit by the blood bank donation team. The blood banks generally provide the kennel owners with food, flea treatments, toys or other benefits for the donor dogs. This contrasts with 'pet' dog blood donors who live with individual owners (usually in their house) and who donate blood at a veterinary clinic which they attend with their owner. Pet dog owners are also generally offered toys or food for their dogs following the blood donation. Both UK blood banks are registered non-profit organisations and are associated with different emergency veterinary care providers.

Blood donation for dogs donating to UK animal blood banks means the collection of 450ml of blood from a conscious animal, using an adapted human collection bag. Donations are taken by a phlebotomist, under the supervision of a veterinary surgeon, after the dog has been health checked and a blood sample tested to determine their suitability as a blood donor (PBB, 2017). The blood donations are then processed and blood products stored and distributed from the animal blood bank. There is no equivalent to

the publicly owned UK National Health Service (NHS) or associated National Blood Service (NBS) for animals (Hobson-West and Timmons, 2015), meaning that donated animal blood is owned by the animal blood bank and must be purchased by veterinary practices. This cost alongside any professional fees for conducting a blood transfusion must therefore be paid by animal owners requesting treatment for their pets. The policy and practices for sourcing animals as blood 'donors' is also very obviously different from the human volunteer models and varies widely between different countries. Models such as the use of family pets as blood donors (Bucheler and Cotter, 1992), as described above, have been contrasted with closed colonies of purpose kept animal blood donors (Dodds, 1993, Hohenhaus, 1994) which are currently favoured in Australia and certain US states. Where colonies of animal blood donors are kept, some countries also permit their sedation and/or biological manipulation to produce specialist blood products such as freeze dried platelets and hyper- immune plasma (Caniplas, 2017).

The donation of tissues other than blood from living animals for use in clinical treatment does not occur in the UK, whereas live feline renal transplantation is practiced in several states in the US (Roudebush *et al.*, 2009). The UK veterinary profession is currently reviewing their stance on feline renal transplantation following the withdrawal of RCVS legislative guidance in 2014 (Veterinary Record, 2016a). Again, despite the relative novelty of organ transplantation for animals the extrapolation of critical human medical developments such as immunosuppressive agents means that rapid clinical progress has been made in the area. A significant contrast exists between human and animal organ donation: Whilst most human organ donations are still cadaveric, animal organ 'donations', where they occur, are currently taken from living animals or animals who are being euthanased. The lack of life support options for animals means there is currently no animal equivalent to humans who are 'brain dead' and the lack of a centralised health service for animals prevents the organised identification of potential animal donors in critical states. The sourcing of living animal organ donors is varied with animal

kidney donors in the US reportedly originating from rescue shelters, research laboratories or being offered by the owner of the recipient animal (UCDavis, 2004).

Other types of living donation and transplant are uncommon in animals although the observed trend towards extending human developments in this area to animals raises the possibility that the scope of veterinary donation procedures could develop further in the future. The collection of animal gametes and embryos for breeding purposes does commonly occur but unlike the human medical equivalents these procedures are not termed 'donation' by the UK veterinary profession, for example, the RCVS code refers to semen 'collection' and embryo 'transfer' (RCVS, 2016). As part of their recent debate on feline renal transplantation, the RCVS council commented on the incongruence between proposed legislative approaches to the transplantation of solid tissue, blood and embryos in veterinary medicine (Veterinary Record, 2016a). The selective use of the term 'donation' by the veterinary profession is discussed in the concluding chapter of the thesis.

In summary, the donation, banking and clinical use of animal blood is developing rapidly in the UK and other countries have also progressed to transplanting organs between living animals. As has already been highlighted for contemporary veterinary practice more generally, clinical developments in human donation are enabling progress to be made in the veterinary setting; however, the reliance on living animal donors and their sourcing highlights the significant organisational differences experienced between the two professions.

In the next section the degree of ethical appraisal of human and veterinary donation practices is compared.

1.3 The ethical analysis of living donation

In this section the field of medical ethics is introduced as a well-developed academic area which has shown a specific interest in the ethics of human

donation practices. This is contrasted with the relatively recent development of the field of veterinary ethics and the scant work which examines ethical approaches to veterinary donation, in spite of identifiable ethical questions being raised in professional, public and regulatory contexts.

The field of medical ethics has a long history with the first written statement addressing the moral obligations of healers being reported to be found in the writings of Hippocrates (Jonsen, 2000). Today, medical ethics is a well-established academic field; researchers in medical ethics benefit from numerous dedicated international journals, for example the *Journal of Medical Ethics* (which has been published since 1975 (JME, 2017)), *Nursing Ethics*, *Public Health Ethics*, *Cambridge Quarterly of Healthcare Ethics*, and *The Journal of Clinical Ethics*. The field also benefits from dedicated academic organisations and senior academic postings, for example, Professor of Medical Ethics Raanon Gillon of Imperial College, London is current President of The Institute of Medical Ethics, described as *'A charitable organisation dedicated to improving education and debate in medical ethics'* (IME, 2017). Medical ethics is also considered to be a core aspect of medical undergraduate training by the UK regulatory body the General Medical Council (GMC), with course teaching necessitating the employment of at least one dedicated full time senior academic (Stirrat *et al.*, 2010). Within the field of medical ethics, there has been considerable specific attention paid to the ethics of human donation which is recognised as unique:

> What is truly distinctive about transplantation is not technology or cost, but ethics … The balancing of the interests of the 'giver' and 'receiver' is the great challenge for those attempting to regulate in this sphere. (Price, 2000:p.2)

This thesis makes use of the considerable body of peer reviewed literature addressing the ethics of human donation and the numerous monographs which are dedicated to donation ethics.

The well-developed academic field of medical ethics contrasts markedly with the field of veterinary ethics, which has been suggested to be embryonic as a dedicated academic field (Sant'Ana, 2014). In support of this assertion and in comparison with the measures described above, no professor of veterinary ethics has ever been appointed in the UK[1]and there is no peer reviewed journal dedicated to veterinary ethics either in the UK or internationally. The teaching of veterinary ethics in UK veterinary schools is recent and very variable, being only rarely taught as an independent subject (Sant'Ana, 2014). Whilst peer reviewed journals and teaching materials in medical ethics are abundant, publications in veterinary ethics are also scarce. To illustrate, a search conducted via the University of Nottingham library collections for books and journals available to medical students using the search terms 'medical ethics' generated 983 results, the same library search conducted using the search term 'veterinary ethics' generated just 11 results (26-01-17)[2]. The academic ethical analysis of veterinary treatment is therefore currently a very small field but it does appear to be developing with a growing international academic community sharing their work and exchanging ideas (Utrecht Univesity, 2016) and a small number of European veterinary specialists in animal welfare science, ethics and law have recently been recognised (ECAWBM, 2017).

In a fascinating historical account of the development of veterinary ethics, Woods (2013) argues that prior to the 1948 Veterinary Surgeons Act treating animals ethically meant '*placing animals under veterinary care and ensuring full veterinary discretion in treatment'* (Woods, 2013:p.4). Rollin (2006) agrees that veterinary ethical concerns were therefore traditionally confined to matters of professional conduct. An increasing hostility towards the exercise of professional power and a rising interest in animal welfare is suggested to have eventually resulted in an increased focus on how veterinary care was

[1] Prof Tannenbaum at UC Davis was reportedly the only professor of veterinary ethics worldwide in 2000 https://www.ucdavis.edu/news/animal-ethics-worlds-only-professor-veterinary-ethics-and-law-talks-about-dilemmas-human-animal

[2] The University of Nottingham has both a Medical School and a School of Veterinary Medicine and Science.

performed, meaning that '*the care provided within the clinical encounter, and its implications for animal welfare, became the focus of veterinary ethical concern*' (Woods, 2013:p.13). The meaning of ethical analysis in the veterinary context has altered significantly since the late twentieth century when *'veterinarians began to recognise the potential conflicts in interest between the animal, owner, society and profession'* (Woods, 2013:p.13). It appears that it is only since this change in perspective that the academic field of veterinary ethics has developed.

The relative size and development of veterinary ethics as an academic field means the lack of work with a specific focus on veterinary donation ethics is unsurprising. To illustrate the claim that specific literature in this area is scarce a PubMed search conducted on 27-01-17 using combinations of the search terms 'veterinary/animal' and 'donation/transplant/transfusion' and 'ethics' returned only one relevant paper focused on ethics and feline renal transplantation (Yeates, 2014) and one published letter concerning the ethics of canine blood banking (Mutinelli *et al.*, 2013) alongside considerable non-relevant literature concerning xenotransplantation, animal research and human donation.

Wider literature searches conducted for the purposes of the thesis confirm the scarcity of current work. The lack of academic ethical analysis of veterinary donation practices might be taken to imply that such clinical practices do not raise significant ethical questions. However, the advent of animal 'donation' practices has been met with considerable public and professional comment concerning the ethical issues raised by such procedures.

At the time that the first animal blood bank was launched in the UK the *Veterinary Record* published correspondence which included searching questions from within the profession. One such letter stated:

> Your report of the setting up of a canine blood bank by Vets Now (VR, April 28, 2007, vol 160, p 563) informs us that blood is collected from

> ‘volunteer dogs’. Is this not an altruistic anthropomorphism? Surely they are volunteered dogs? (Cox, 2007:p.636)

The following issue of the Veterinary Record included a further comment on the subject:

> Laudable though it is to think of having a blood bank, it isn’t so long ago that the moral issue of organ donation by animals and the lack of informed consent were being debated. Blood today, kidneys tomorrow perhaps? (Culpin, 2007:p.707)

The veterinary journal *In Practice* features a regular ‘everyday ethics’ column which invited a comment on the ethical aspects of canine blood donation by the author (Ashall, 2009), in this article the practical challenges associated with the banking of canine blood and how ethical theory might be used to aid decision making were addressed. A published response to this article again raised the question of informed consent and made comparisons between pediatric and animal living donations. (Mullan, 2009). One more recent letter to the *Veterinary Record* aims to dispel *‘several ethical concerns’* about the use of ‘rescue’ dogs as blood donors in Italy (Mutinelli *et al.*, 2013:p.172). This letter argues that such animals can benefit from additional health checks and blood screening and could be used as blood donors without necessarily being exploited. No responses to this letter were published and, as highlighted above, there appears to have been scant academic thought about the issues which are raised. Indeed, the need to focus academic ethical analysis on innovative animal treatments, specifically including transplantation was raised at the first international conference addressing veterinary ethics in 2011:

> Advances in veterinary surgery enable us to prolong animal life using heart bypass procedures and renal transplants and to give artificial joints to arthritic dogs. Yet there is an increasing sense that these developments have not been scrutinised ethically and that such review is overdue (Wathes *et al.*, 2013:p.xiii)

Aside from professional debate in the veterinary journals, media coverage of animals as living donors of blood or organs highlights some of the ethical risks this area faces and includes reports of illegal and exploitative practices:

> ‘Texas vet kept dog alive for blood transfusions months after planned euthanization’, owners say. An Aledo family has been reunited with a dog they believed was put down in October. The family claims that vets convinced them that their dog, Sid, needed to be euthanized, then kept the 4-year-old pup alive and 'abusively kennelled' so they could collect blood from him (NYDN, 2014).

Debate among animal welfare charities and other commentators on the subject of feline organ donation was reported in the UK media at the time of initial approval of the procedure by the RCVS:

> Just how much do you love your cat? It could be the ultimate gesture of devotion for a treasured pet. For £8,000, owners of cats with kidney disease are to be given the chance to extend their lives by giving them an organ transplant. Members of the general council of the Royal College of Veterinary Surgeons (RCVS) gave the practice the official go-ahead at a meeting in London yesterday. The decision sparked concern among groups, including the RSPCA[3], about the ethics of organ transplants in animals, in particular over their obvious lack of choice and consent. Animal charities were also horrified at the prospect of feral or stray cats being captured and used as donors. Other commentators said it was 'frivolous' and 'distasteful' to be discussing kidney transplants for cats when hundreds of human patients die each year while waiting for replacement organs (Chapman, 2005).

This report indicates that animal welfare bodies may also have considerable concerns regarding the use of animals as living organ donors.

[3] Royal Society for the Prevention of Cruelty to Animals.

Finally, it could also be argued that ethical uncertainty surrounding the justification of living animal donation practices is exemplified by inconsistent legislative approaches both within the UK and internationally. For example in 2003 the RCVS published guidelines which permitted feline renal transplantation in specific circumstances but the guidance was withdrawn in 2014, with the procedure never having been conducted in the UK. A representative of the profession gave a media statement in 2012 which suggested that the removal of a healthy organ from a living animal could not be justified:

> The reason the operation is not done in the UK is the ethical dilemma posed by removing a kidney from a donor cat, as it is considered an unnecessary procedure (Grant, 2012).

Feline renal transplants are conducted by specialised veterinarians in the US. Media reports there indicate that the donation is justified by offering rescue animals a new home:

> To provide organ donors, the vet has teamed up with the SPCA[4] in York, Pennsylvania, offering the rescue animals a new home with the owners of the sick animal in return for a kidney (DailyMail, 2013).

The topic of live feline renal transplantation is currently an active policy area with the UK veterinary profession awaiting revised guidelines on feline renal transplantation from the RCVS.

In summary, this section has compared the academic fields of medical and veterinary ethics and considered their interest in the ethics of donation. The relative lack of existing work which focuses on ethical aspects of veterinary donation practices is attributed to the very recent development of the field rather than a lack of ethical issues to explore, as evidenced by visible professional, media and regulatory concerns. The next section identifies a

[4] Society for the Prevention of Cruelty to Animals

comparable situation with regards to sociological interest in human and animal donation practices.

1.4 The sociology of living donation

In this section the developed field of medical sociology and its interest in human donation is again contrasted with the limited attention given to sociological aspects of veterinary practice and veterinary donation specifically. Once more, the likelihood that this clinical area could prove an interesting case for sociological examination is illustrated by reference to some of the recent media and social media accounts of living animal donation practices.

Medical sociology is a recognised sub-discipline of sociology and again benefits from dedicated peer reviewed journals, UK academic postings at all levels and specialised undergraduate and postgraduate teaching. As was highlighted in the earlier section on medical ethics, sociologists of medicine have also identified human donation as an area of specific interest and the literature includes detailed examination of the social rationale behind human donation practices. For example, in an early and fundamental work Titmuss (1970) explored the donation of blood in Europe and characterised its social nature as a 'gift' relationship. This thesis will consider Titmuss's work and the considerable academic challenges to 'gift' characterisations of blood donation which followed, along with medical sociological work which explores other types of living human donation (See Chapters 5 and 6).

By contrast, veterinary sociology is not yet a recognised academic field to any degree and this is almost certainly due to the fact that sociology has traditionally been concerned with human rather than non-human animals. Sociology has been defined as:

> The scientific study of human society and social relationships (OED, 2017)

This exclusive focus on humans is argued to have constrained a proper consideration of the significance of animals within society (Hobson-West, 2007). Indeed, sociology has even been suggested to suffer from a 'species barrier':

> To read most sociological texts, one might never know that society is populated by non-human as well as human animals (Tovey, 2003:p.196)

However, post-humanist theories of society aim to destabilise the binary social categories representing 'human' and 'non-human' animals, which have been traditionally accepted by sociologists (Derrida, 2008). Theoretical and empirical work is increasingly emerging which highlights that animals do play a socially significant role in society and that socially relevant relationships can exist between humans and non-human animals (Latimer, 2013; Fox, 2006; Charles, 2015)[5]. It has even been recently argued that human-companion animal relationships are significant in the health context. For example, Ryan and Ziebland (2015) draw on a secondary analysis of in-depth interviews with chronically ill patients to show that pets are described as family members who perform a vital role in the patients' management of their disease. They argue that traditionally *'researchers may not recognise nonhuman actors as such and therefore exclude them from consideration*' (Ryan and Ziebland, 2015:p.69). The empirical findings of the thesis ultimately support this close interrelationship or entanglement between experiences of human and animal health (Chapter 6).

It is again unsurprising that veterinary sociology is poorly developed, in this case because of a broader disciplinary disregard for non-human animals. However, whilst veterinary medicine aims to improve animal health, a triadic relationship clearly exists in the veterinary setting between the interests of the vet, animal and owner, meaning that both human-human and human-

[5] This literature is considered fully in Chapter 6.

animal relationships are relevant in animal medicine. In fact, the tension that veterinarians experience in trying to serve the interests of both animal patients and paying clients has been called *the* fundamental question in veterinary ethics (Morgan, 2007). This point of connection between the complex social context of veterinary medicine and veterinary ethical decision making is the lens through which this thesis examines veterinary donation and this perspective underlies the central research questions and research methodology. To date, the sociological exploration of these triadic relationships and their role in veterinary decision making is nascent but work is starting to emerge which illuminates this fascinating area (Morris, 2012).

With regards to veterinary donation specifically there are two published journal articles which discuss both ethical and social aspects of canine blood donation. The first, published in 2006 in the US by Deluca *et al*, describes and evaluates a community based canine 'volunteer' blood program as an alternative to the closed colony canine blood banks which also exist in the US. Through describing and defending their own operational choices in both social and ethical terms this group informally explores some interesting observations on the motivations and behaviours of the owners of donor dogs (Deluca *et al.*, 2006). Whilst presented as anecdotes in Deluca's paper, the empirical analysis in this thesis appears to confirm and expand upon many of their observations in a more robust manner from within the UK. Indeed, the only other published paper addressing sociological aspects of animal blood donation arises from the empirical data analysis in this thesis. Through exploring the accounts of UK canine blood donor owners the paper identifies complex motivations for owners who offer their pet dogs as blood donors (Ashall and Hobson-West 2017). This paper links veterinary empirical data analysis with literature addressing the sociology of human donation, developing sociological understanding of both human and animal living donation and the human-animal bond. The work also opens up an entirely new vista for medical sociologists through eroding traditional species boundaries in the health context.

As described in the section on ethical analysis above, the limited sociological analysis of veterinary donation practices should not be taken to imply that they are of little interest. Media and social media accounts of living animal blood donation practices indicate that the social meaning and context of such practices deserves further detailed analysis. For example a connection between humans and animals as blood donors is visible in an advertising campaign used by the National Blood Service which refers to a former UK pop group called McFly:

> "If my cat can do it then I can" McFly's Tom Fletcher explains how his cat turned him into a blood donor. (NBS, 2013)

Furthermore, that animal and human blood banking systems are alike is suggested in information provided to pet owners by one animal blood bank, which compares itself with the human National Blood Service:

> Similar to the human blood service, dog owners kindly bring along their much loved canine companions to give blood at one of our many sessions across the country. (PBB, 2017)

In social media commentary on animal blood donation, animal blood donors are suggested to be 'kind':

- 

  Lorna Routledge: Fabulous gesture of kindness by these two amazing dogs! xx

  9 October at 10:52

- 

  Jennifer Moore: Well done beautiful pet lifesavers

  9 October at 08:34 (Facebook, 2014)

Media coverage of animal blood transfusion is often focussed on dramatic positive outcomes:

> Pet blood donation saved my dog Rosie's life. A dog's life has been saved by a blood donation from another pet. Rosie, a 10-year-old bearded collie, received a life-saving transfusion hours before an emergency operation to remove her spleen after developing tumours. (EveningTimes, 2007)

Within this news article the donor animal's owner is also reported to compare human and animal blood donation:

> "I'm a blood donor myself, so it was only natural for me to take Kai along to give blood to the Pet Blood Bank." (EveningTimes, 2007)

These interesting informal accounts show how living animal donations may indeed prove to have significant social meaning with regards to how such practices are imagined and understood by society and animal owners.

In summary, this section has compared the field of medical sociology and its specific interest in the social context of human donation to the underdeveloped field of veterinary sociology and the relatively unexplored social context of veterinary donation. It was argued that a historical 'species barrier' is beginning to be challenged by work which reframes human-animal relationships and explores their significance for medicine and veterinary medicine. The limited existing knowledge base which explores the different social context of veterinary donation was argued to contrast with the interesting social aspects of current media and social media representations of animal blood donation and transfusion.

The introductory chapter so far will now be summarised, before the research questions and research approach are described.

1.5 Summary

In this chapter contemporary veterinary practice was described as technologically advanced with many aspects of human medicine now being directly applied to animals. Living donation practices were introduced as a growing clinical area with both historical and present day connections existing between the human and animal contexts. Significant differences in the sourcing of animal donors and the organisation of animal blood banking systems were also identified. Finally the ethical and sociological analysis of living donation practices was considered with human donation shown to be of specific interest within the developed fields of medical ethics and medical sociology. Veterinary donation practices were shown to have had very little ethical or sociological analysis in spite of visible professional and public concerns alongside specific societal framings of such practices. The research questions which have developed from this introductory analysis of living animal donation will now be defined.

1.6 Research questions and research approach

This section defines three main research questions and describes the broad research approach the thesis takes.

Research Question 1 (RQ1) responds to the marked contrast in academic ethical analysis between human and animal donation practices in spite of their practical similarities, the shared learning which is enabling the development of veterinary practices, and the ethical concerns which have been raised by the application of living donation practices to animals. The question aims to identify what can be learnt from the considerable ethical analysis of living human donation in order to develop understanding of the justification for comparable animal procedures:

RQ1 To what extent can the ethical justifications for living human donation be applied to living animal donation?

This question is answered by a comparative ethical analysis of human and then veterinary living donation practices. The comparative analysis takes the form of a detailed examination of ethical approaches to human living donation practices and an exploration of their theoretical underpinnings. This is followed by an analysis of how identified theoretical approaches to veterinary ethics might enable the systematic reconstruction or adaptation of ethical arguments which support comparable veterinary donation practices[6].

Research Question 2 (RQ2) explores the different social context of veterinary donation and aims to inform and contextualise the proposed ethical arguments:

RQ2 How does the different social context of veterinary donation inform or undermine the proposed ethical justifications?

This question is answered through the analysis of novel empirical data collected via interviews with animal owners, veterinary surgeons and nurses who support and use a UK canine blood bank. An empirical bioethics approach is used to integrate the ethical and empirical findings in order to construct an ethical framework for living animal donation.

Research Question 3 (RQ3) responds to the legislative inconsistencies identified both within the UK and internationally and aims to make specific policy recommendations before considering the broader implications of the work:

RQ3 What are the policy and wider implications of the research?

To answer this question the proposed ethical framework is used to assess and critique current regulatory approaches to canine blood donation and feline renal transplantation in the UK. Recommendations for altered regulatory approaches are made. The wider impacts of the work for the veterinary profession, medical profession and academic communities are also identified.

[6] More detailed methodological information for all aspects of the research is given in the next chapter.

In summary, this thesis reports four discrete research tasks: A) A comparative normative analysis, B) a novel empirical analysis, C) the construction of an ethical framework and D) a review of regulatory approaches in the UK. These tasks are covered via the following chapter structure.

1.7 Chapter structure

The four research tasks are structured within the central five chapters of the thesis as follows:

CHAPTER 1	INTRODUCTION	p.13
CHAPTER 2	RESEARCH METHODOLOGY This chapter contains a detailed discussion of the methodology for each task.	p.36
CHAPTER 3	AN ETHICAL ANALYSIS OF LIVING HUMAN DONATION This chapter contains the first half of the comparative ethical analysis	p.72
CHAPTER 4	A COMPARATIVE ETHICAL ANALYSIS OF LIVING ANIMAL DONATION This chapter contains the second half of the comparative ethical analysis	p.117
CHAPTER 5	EMPIRICAL CHAPTER 1 This chapter contains the first half of the novel empirical analysis	p.170
CHAPTER 6	EMPIRICAL CHAPTER 2 This chapter contains the second half of the novel empirical analysis	p.197
CHAPTER 7	A JUSTIFICATORY FRAMEWORK FOR LIVING ANIMAL DOANTION AND UK REGULATORY IMPLICATIONS This chapter contains the construction of the ethical framework and the review of UK regulatory approaches.	p.228
CHAPTER 8	THESIS DISCUSSION AND CONCLUSIONS. This chapter includes discussion of the wider impacts and potential future research	p.263

Table 1 Thesis chapter structure

Chapter 2 provides a detailed description and justification for the research methodology before the first research task, a comparative normative analysis, begins in Chapter 3.

2. RESEARCH METHODOLOGY

This chapter describes and justifies the research approach. It highlights why the chosen methods represent the best route to answering the main research questions. The chapter is reflexive and also outlines the methodological limitations and challenges of the thesis, making its content different to that expected in a standard scientific thesis.

2.1 Development of the interdisciplinary approach and thesis structure

This research project was born out of personal clinical experiences as a veterinary surgeon working in both animal research and the canine blood banking industry in the UK. Animal research in the UK is justified according to clear ethical frameworks which underpin the regulation of harmful scientific procedures under the Animals (Scientific procedures) Act (ASPA, 1986). Through subsequent work in the practice of canine blood donation it appeared that there was a comparative lack of clear ethical justification underpinning the regulation of veterinary donation under the Veterinary Surgeons Act (VSA, 1966). Talking to animal owners during blood collection sessions also generated a unique insight into the complex reasoning which influences pet owners' decision making when offering their pets as blood donors. Finally, through completing a Master's degree in Medical Ethics and Law it became apparent that comparable human donation practices *were* justified by clear and specific ethical frameworks. A research proposal was developed, aimed at creating a comparative ethical framework for companion animal donation practices, informed by a fuller understanding of the complex social environment in which such practices take place[7].

In academic terms, real world experience of the overlapping ethical and social complexity of this novel clinical area resulted in the early strategic decision to undertake an interdisciplinary research study which would combine both

[7] This proposal secured a Clinical Fellowship in Ethics and Society from the Wellcome Trust who funded this research project. Grant number 100526/Z/12/Z

ethical and empirical analysis (further details on specific interdisciplinary approach follows). Interdisciplinary research has been defined as:

> A mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding, or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice. (National Academies, 2004:p.2)

Therefore, interdisciplinary work can use a combination of different research methods arising from different disciplines. This chapter describes the chosen interdisciplinary approach; justifying the intentional merging of two disciplines as consistent with retaining the academic validity of the work. This description of the methodology explains why the thesis cannot conform to some of the standard approaches or structures traditionally expected in work which takes a single disciplinary research approach, such as in scientific, philosophical or social scientific theses.

For example, the thesis does not commence with a traditional literature review. The aforementioned lack of relevant literature specifically addressing donation in the veterinary context influenced the early decision to utilise the considerable literature addressing both ethical and sociological aspects of comparable human donation practices. In order to aid clarity and respect boundaries both between the two academic disciplines (Garrard and Wilkinson, 2005) and the two professions, the literature concerning medical ethics, medical sociology and veterinary ethics is considered separately within the relevant ethical and empirical chapters although there is some degree of intentional overlap.

In addition, initial attempts at a systematic literature review quickly revealed the limitations of such a strategy for this thesis. In this work the literature is identified, explored and discussed as an ongoing process throughout the thesis as its relevance is identified and argued through either the ethical or

empirical analysis. Jensen and Holliman (2009) describe a similar use of literature which is semi-inductive, whereby identified theoretical perspectives and methodological approaches are persuasive within their data analysis but the empirical analysis also informs their use of literature (further detail on how the literature is used in each chapter follows below). This differently structured use of published literature is both a consequence of and a requirement for research which attempts to cross both disciplinary and species boundaries and represents a methodological innovation of this work.

The remainder of this chapter is chronological in its approach to describing the specific research decisions and methods. It begins with an exploration of how interdisciplinary work combining ethical and empirical research is currently understood as "empirical bioethics", before defining the particular interdisciplinary approach taken here. Next it describes the approach taken in the normative chapters of the thesis before detailing the empirical research. Finally, the aims and approach of the regulatory and framework chapter are discussed before a critical reflection on the research process as a whole.

2.2 Empirical bioethics

This section shows how the integration of normative and empirical work has been discussed academically, highlighting the potential value of undertaking such interdisciplinary research but also the possible risks of this approach. The approach this thesis takes to combining the two disciplines with the aim of producing outputs which are robust academically as well as useful practically is then described.

Argument surrounding the academic relationship between ethical and empirical research has become vigorous in recent years; however, the challenge of applying purely philosophical ethics to practical real world situations is not so recent. Philosopher Peter Singer wrote *'Practical Ethics'* in 1979 and presented a very clear account of the role of ethics in solving real world problems. He suggested that:

> The extent to which an issue can be usefully discussed philosophically depends on the kind of issue it is. Some issues are controversial largely because there are facts in dispute…Philosophers lack the expertise to tackle (this) question. In other cases, however, the facts are clear and accepted by both sides; it is conflicting ethical views that give rise to disagreement over what to do. Then the kind of reasoning and analysis that philosophers practise really can make a difference (Singer, 1979:p.vii).

This commonly accepted view of the distinction between 'facts' and 'values' and the separate questions of what 'is' and what 'ought' to be has been fundamental in maintaining a clear boundary between work defined as normative ethics and empirical research.

In recent years, however, there has been an increasing body of work which describes itself as empirical ethics and aims to combine both normative (ethical) and empirical (factual) analysis in real world problem solving. It has been argued that this may have resulted from dissatisfaction with a foundationalist interpretation of applied ethics, the integration of medical ethicists into the medical setting and the rise of the evidence based paradigm in general (Borry *et al.*, 2005). In the case of this particular research project, clinical work in veterinary donation, combined with academic study in medical ethics framed the research questions and thus the interdisciplinary approach. This work therefore appears to offer an interspecies example which supports Borry *et al.* (2005) in that integrating ethicists into clinical settings may promote empirical ethics research.

Indeed, Zussman (2000) also uses the medical professional's embeddedness in social reality as an example of the unhelpfulness of rigid disciplinary borders between medical ethics and medical sociology, and goes on to argue that '*Just as the philosophical medical ethicists might do well to acknowledge the underlying empirical grounds of their claims, sociologists would do well to acknowledge the normative component of theirs (p.11)'*. But what do such

claims mean practically with respect to the appropriate degree of integration between the two academic disciplines? Herrera (2008) rejects the claim that bioethics should 'go empirical', arguing that '*Disagreements about the relationship between between facts and normative arguments should be seen as part of the normal enquiry in bioethics, not evidence that reform is needed (p.137)'*. Furthermore, whilst Leget *et al.* (2009) defend a two-way relationship between empirical and normative theory, they assert that '*Against efforts to fully integrate the normative and the empirical into one synthesis, we propose that the two should stand in tension and relation to one another (p.226)'*. The appropriate degree of integration of empirical and normative disciplines and the specific processes which enable such integration have become, in themselves, a topic of considerable academic debate. This will be expanded on a here before a discussion of how the benefits and challenges of an empirical ethics approached has shaped this thesis.

In 2009 the journal *Bioethics* published a special issue on empirical ethics. The editors' stated aims can be summarised as: Exploring the challenge empirical ethics poses to the status of ethical theories as authoritative, debating the relationship between moral theory and empirical data as sources of knowledge and exploring concerns surrounding maintaining quality in such work (Molewijk and Frith, 2009). In fact, the vast majority of papers published in this volume were in principle open to the idea of 'empirical ethics' and several proposed methods or theories for combining normative and empirical work. In this issue Parker (2009) clearly expressed the overarching benefits and drawbacks of empirical ethics approaches:

> The turn to empirical ethics answers two calls. The first is for a richer account of morality than that afforded by bioethical principlism, which is cast as excessively abstract and thin on the facts. The second is for the facts in question to be those of human experience and not some other, unworldly realm. Empirical ethics therefore promises a richer naturalistic ethics, but in fulfilling the second call it often fails to heed

> the metaethical requirements related to the first. Empirical ethics risks losing the normative edge which necessarily characterises the ethical, by failing to account for the nature and the logic of moral norms (Parker, 2009:p.202).

Parker claims that whilst empirical ethics may be richer and more grounded in reality, it risks generating invalid ethical claims which lack a conceptual or theoretical rationale. Hedgecoe, however, writes from the perspective of the social sciences, pointing out that the rigid application of philosophical approaches may restrict the societal value of conceptual work:

> The social science critique claims that traditional philosophical bioethics gives a dominant role to idealised, rational thought, and tends to exclude social and cultural factors, relegating them to the status of irrelevancies. Another problem is the way in which bioethics assumes social reality divides down the same lines/categories as philosophical theories. (Hedgecoe, 2004:p.120)

The limitations of purely philosophical approaches can be taken even further to raise the question of whether empirical research should be recognised for its role within the development of ethical theory, rather than as a tool which supports the application of abstract ideals. Such a perspective has been proposed by Lucy Frith (2012) who suggests an interdisciplinary approach which:

> Sees practice as informing theory just as theory informs practice; the two are symbiotically related (Frith, 2012:p.198).

But even proponents of such a close relationship between empirical and ethical research maintain the need for disciplinary boundaries. Garrard and Wilkinson (2005) argue that a fact-value gap does exist, but that this does not make empirical information irrelevant to ethical debates, furthermore that this gap may not be wide enough to preclude a close relationship between empirical data and bioethics. Respect for disciplinary boundaries is considered

important in maintaining the robustness of both normative and empirical components of interdisciplinary work, thus countering concerns regarding the quality of empirical ethics research (Parker 2009).

Whilst empirical ethics is undoubtedly still novel in the veterinary context, such an approach is becoming more visible in bioethics and medical ethics. The different research approaches which are visible highlight the practical complexities associated not only with attempts to bridge normative and empirical disciplines, but combine research fields whose aims are either theoretical or applied (Zussman, 2000). Existing empirical ethical studies appear to include approaches which correspond to either Parker's (2009) representation of empirical ethics as providing real world 'facts' to support normative analysis, or to a more symbiotic approach, consistent with Frith (2012). For example, Lipworth *et al.* (2015) published an empirical ethical study on disclosure and health journalism. The study draws on interviews with stakeholders and argues that the data analysis provides empirical support for their normative claims concerning transparency and regulation. A more symbiotic approach is seen in some of the literature specifically relevant to this thesis. For example, in their paper *Coercion and choice in parent-child live kidney donation* Burnell *et al*. (2015) analyse interview data from parents donating a kidney to their child. The figure below represents the approach taken by the authors *w*here empirical data analysis is claimed to both inform and refine their philosophical analysis in a way which extends beyond the mere provision of 'facts' (Frith, 2012), rather, '*A priori philosophical arguments were reconsidered in light of themes that emerged from empirical data* (p.305).

Specifically, the authors use their empirical findings to challenge traditionally accepted criterion for autonomous decision making, arguing that *'Using one's*

own moral values to constrain one's own choices can be compatible with voluntary decision making' (Burnell *et al.*, 2015:p.304)[8].

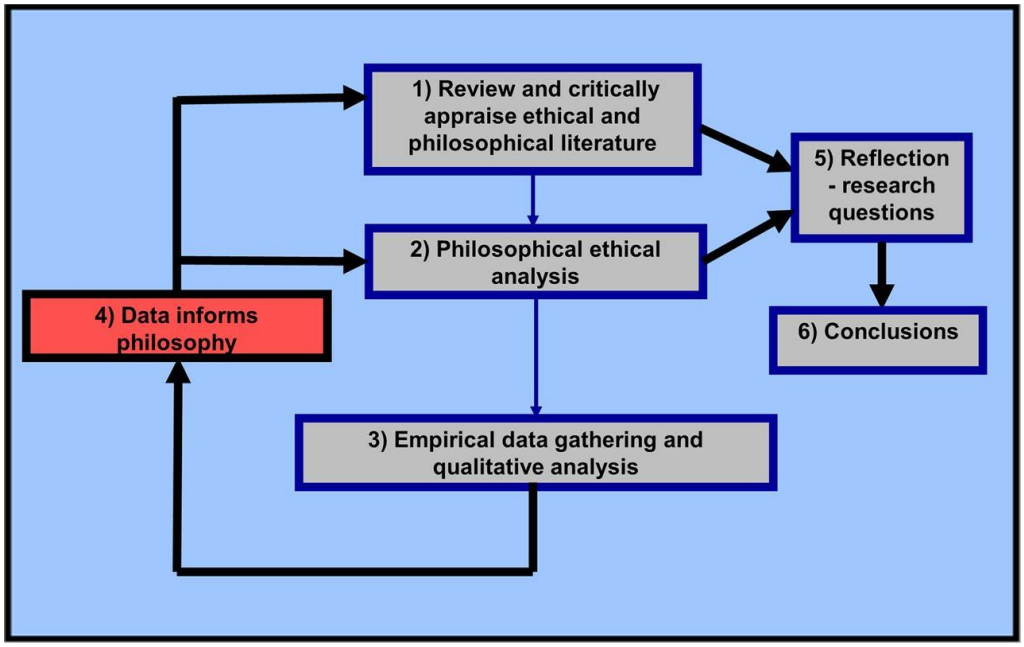


Fig 1 *The empirical bioethics approach used in the study* (Burnell *et al.* 2015) Reproduced from https://www.ncbi.nlm.nih.gov/pubmed/25378550

In summary, interdisciplinary work has the potential to provide a richer normative outcome which is informed by the real world, however, the degree, nature and extent of connections between the two disciplines is unsettled and empirical bioethics does not yet follow a prescribed methodological formula in its approach. The risk of poor methodology is that such work will be inferior to, not greater than, the sum of its individual parts. Existing empirical bioethical approaches include the use of empirical research methods to provide factual support to ethical argument and the construction of novel philosophical arguments which are dependent on empirical data analysis. This variation in approaches means that all interdisciplinary work should clearly define a specific research approach which generates outcomes that depend upon but do not confuse the two disciplines.

[8] For this thesis it is particularly relevant that Burmell *et al.* (2015) promote an interdisciplinary approach to exploring consent for living donation within human families.

For this thesis the grounding of ethical arguments within a real life clinical context was considered very important and the policy recommendations which are made in Chapter 7 highlight the practical significance of an empirical bioethics approach. A symbiotic relationship between normative and empirical work (Frith, 2012) is consistent with the approach taken in this thesis, however, considerable effort is also made to maintain a clear distinction between what constitutes ethical argument and what constitutes empirical 'fact' (Parker, 2009). Fundamentally, clear disciplinary boundaries are maintained with the normative and empirical research being addressed in separate chapters with robust conclusions for each discipline being presented[9]. However, at several points in the research process, structured interaction between the disciplines has been managed as detailed below:

1. The ethical arguments made are dependent upon critical empirical assumptions. Once identified these assumptions were tested through their inclusion in the empirical interview schedule.
2. Unexpected (deductive) themes emerged during the empirical data analysis and were used to refine the conceptual ethical arguments.
3. The empirical data analysis provided novel contextual detail which was used to embed the proposed ethical framework into regulatory recommendations.

These interdisciplinary research processes, which are innovative in the veterinary context, create ethical and sociological arguments which are both informative and robust and also generate highly contextual regulatory recommendations. Acknowledging the unsettled landscape of empirical bioethics research means acknowledging that reaping the benefits of an interdisciplinary approach might also create research limitations. For example, the direction of empirical work was constrained to some degree by a need to respond to the outcomes of the ethical analysis. Furthermore, the desired practical outputs of the thesis in terms of the policy

[9] Papers for peer reviewed publication within each discipline which arise from the thesis are included after the appendix.

recommendations, are intended to be of interest to the veterinary profession, but might be considered of little value to either academic discipline. Further reflection on the interdisciplinary research approach follows in section 2.6.1.

The chapter now moves on to describe the ethical and empirical components of this research.

2.3 Ethical analysis

The next two substantive chapters of the thesis comprise a comparative ethical analysis of human and animal living donation practices. These chapters respond to Research Question 1: *To what extent can the ethical justifications for living human donation be applied to living animal donation?*

Describing how the comparative ethical analysis is conducted necessitates first defining what medical (and veterinary) ethics is. The seminal work *Philosophical Medical Ethics* (Gillon, 1985) usefully begins by defining what medical ethics *is not*:

> It is not the enterprise of quoting or even drawing up professional codes of conduct. It is not an account of the legal constraints on Doctors' behaviour in medicomoral contexts. It is not a sociological/psychological/anthropological/historical effort to discover the attitudes, mores, or ethos of a particular community, medical or otherwise. Finally it is not the expression of religious rules or sentiments. (Gillon, 1985:p.1)

In the context of this interdisciplinary work the clear exclusion of sociological attitudes and ethos is particularly relevant. So what, then, *is* medical ethics suggested to be?

> Medical ethics is the analytic activity in which the concepts, assumptions, beliefs, attitudes, emotions, reasons and arguments underlying medicomoral decision making are examined critically. (Gillon, 1985:p.2)

According to this perspective, then, engaging in medical ethics is engaging in critical thought. It is examining the rationale behind medical decision making and analysing the moral basis upon which such decisions are made. Likewise, Pence (2015), describes the central role of '*reasoning'* and '*justification'* in the activity of medical ethics (p.1). As such, the analytic activity of ethical reasoning which Chapters 3 and 4 are based upon is described by both Gillon (1985) and Pence (2015). Furthermore, Beauchamp and Childress (2013) describe practical ethics or applied ethics as *'employing general concepts and norms to address particular problems'* (p.2). The ethics chapters of this thesis comprise both a critical examination of the ethical rationale behind living human donation decisions and an exploration of their applicability in the veterinary context. The intellectual value of these chapters is in the critical analysis of existing arguments and in the development of novel justificatory arguments which apply existing rationale to an emerging field. The ethics chapters do not therefore include novel data but their use of literature is analytic; building justificatory arguments upon a critical analysis of specific literature, rather than merely reviewing the state of existing work.

Initially, Chapter 3 presents an in depth ethical analysis of human living donation. This analysis draws on multiple streams of medical ethics literature including academic papers, policy guidelines and monographs. The analysis draws together ethical approaches to general medical treatment and to the donation of human blood and solid tissue. It identifies the overarching justificatory arguments for human living donation and traces their theoretical underpinnings, in order to facilitate a comparative analysis. Detailed examination of the justificatory arguments specifically considers recent developments in ethical approaches to human living donation and the ethical implications of growing empirical work in the field. Areas of current uncertainty and recent challenges to traditionally accepted ethical arguments are also explored.

From this ethical analysis of human living donation the thesis moves on to consider the case of living animal donors in Chapter 4. Using veterinary ethics

literature, common ground between the theories and principles which underpin the arguments for human living donation and existing ethical approaches to veterinary medicine are identified. On the basis of the shared ethical approaches which exist, Chapter 4 systematically re-evaluates the findings of the medical ethics analysis for their relevance to the veterinary setting. The ethical arguments which might be applied or adapted for the veterinary setting are reconstructed in addition to identifying the limitations, assumptions and boundaries of such comparative approaches (Ashall, 2013). The arguments are again supported by drawing together a broad range of academic literature, grey literature, policy documents and monographs which address aspects of veterinary clinical practice, veterinary ethics, animal ethics and research ethics.

In summary, the comparative ethics chapters that follow do not represent a standard literature review. Rather than drawing on a systematically defined body of work identified through predetermined search criteria, literature identification is an ongoing and consecutive process, designed to strengthen, challenge or explain the particular ethical augment being explored. The identification of relevant literature for the ethics chapters involved multiple searches, snowballing, conference attendance and suggestions from supervisors, academic and professional contacts.

The next section describes the empirical phase of the research.

2.4 Empirical analysis.

The empirical section of the thesis responds to Research Question 2: *How does the different social context of living veterinary donation inform or undermine the proposed ethical justifications?* This section describes the methods used to explore the social context of living animal donation, considering consecutively the framing of the empirical research, the data collection process and finally the data analysis.

2.4.1 Framing the empirical research

The first strategic decision regarding the empirical research phase was the decision to use qualitative, rather than quantitative methods. For all research, the choice of method is dependent on the question which is being asked. Quantitative methods are very familiar within veterinary research which has traditionally been focused on questions of a scientific or clinical nature. However, there is some evidence of a growing interest in qualitative research within the veterinary community, for example Christley and Perkins (2010) argue that:

> There are many forms of knowledge that apply when making sense of the world and deciding on actions. Scientific knowledge – which dominates veterinary thinking - is just one form of knowledge; other forms of knowledge exist and may be important in the development of [animal] owners' beliefs and to inform their decision making (Christley and Perkins, 2010:p.285).

Qualitative research is argued to further knowledge by making sense of phenomena in terms of the *meanings* that people bring to them (Britten *et al.*, 1995). This contrasts with the numerical focus of quantitative research approaches.

The decision to use a qualitative approach to exploring the social context of veterinary donation stems from the arguments made above concerning the research relationship between the two disciplines. It would certainly have been possible, and perhaps interesting, to apply a quantitative approach by examining how many people are in favour of companion animal blood or organ donation or how many vets use donated animal blood or tissue products. However, there is little value in such quantitative data alone to developing an ethical framework; it would go against the previously made arguments surrounding disciplinary boundaries to suggest that a practice might be ethically justified because a certain proportion of the population choose to support it. As Garrard and Wilkinson put it:

> There is no necessary connection between what "society thinks" about any given issue and the moral truth of the matter (Garrard and Wilkinson, 2005: p.85).

In contrast, the *meaning* and *purpose* of donation procedures for pet owners and clinicians may well inform or challenge a conceptual ethical argument. Of course, even questions of meaning or purpose could be explored using surveys or questionnaires which quantify the frequency of various answers. However, the novelty of this research area means there is insufficient fundamental knowledge to devise meaningful questions for use in such a format. The most appropriate research methodology for developing the understanding of meaning in this previously unexplored area was therefore considered to be the collection and analysis of qualitative data.

The specific methods of qualitative data collection which were originally considered for this work included both ethnography and interviewing. Ethnographic methods have been described as participating overtly or covertly in people's lives for an extended period of time (Hammersley and Atkinson, 1995). A recent and well received piece of qualitative research which focuses on the veterinary profession used ethnographic data collection methods to examine guilt and grief in veterinary euthanasia (Morris, 2012). This method allowed Morris to produce a rich and detailed contextualised account of the subject in which the research participants were central in determining the research themes and direction. Morris defends her choice of method by suggesting that it allowed her to reduce her influence on the research by becoming accepted within the community, and that she was able to use data which described people's actions as well as what they had to say; thus grounding her analysis in both participant's narratives and observable experiences.

However, ethnographic research methods are recognised as time consuming (Millen, 2000) and for this interdisciplinary research the outcomes of the normative analysis were intended to inform the data collection in a more

structured way. A different method was used by Busby (2010) whose work is relevant to this thesis in both topic and method. Busby explored informed consent and the donation of cord blood stem cells in humans and describes her data collection as follows:

> Thirty six women…were contacted for interview at six-eight weeks after their childbirth. (…) A topic guide for these interviews included questions designed to illuminate the knowledge, expectations, concerns and experiences of these women in relation to cord blood banking (p.24).

Busby (2010) used a form of interviewing described as semi-structured; where minimal guidance is provided by the researcher using an interview schedule or a loose collection of themes but the interviewee is given much more freedom than in a survey interview (Bryman, 1988). Whilst even semi-structured interviews have been argued to frame the researcher more formally than an ethnographic study (Okely, 2012), for this research a limited degree of structure within an interview format was considered ideal for allowing the identified themes to be discussed in a reasonable time frame, whilst minimising researcher influence. The ontological and analytical implications of using interview data alone will be considered later in this section.

With respect to defining the scope of the interviews to be conducted, personal clinical experience had raised awareness of a number of stakeholder groups with an interest in veterinary donation such as animal owners, veterinary professionals, animal welfare organisations and regulatory bodies. The initial research proposal included a plan to interview representatives from each identified stakeholder group but this was revised early in the research process when it became clear that the depth of data analysis and degree of theorisation it was possible to achieve from the initial animal owner interviews would necessitate a reduction in the scale of data collection elsewhere. Furthermore, following the normative analysis and a developing

understanding of the intended relationship between the normative and empirical phases of the research, opinion on the value of broad as opposed to strategic sampling for informing the specific ethical arguments raised was revised. Ultimately, semi-structured interviews were conducted with donor animal owners and veterinary professionals only.

The next section reports on the interviewing process itself, including interview candidate selection and the development of the interview schedules.

2.4.2 Empirical data collection

Canine blood donation is the only example of living animal donation currently undertaken in the UK. Therefore, whilst the thesis explores living animal donation more broadly, the interviews were restricted to stakeholders involved in this specific case example only.

A purposive approach was taken to selecting interview candidates from within the identified stakeholder groups in so far as they were not selected at random, but strategically in order to ensure there was variety in the resulting sample (Bryman, 2012). Different types of donor animal owner were identified, specifically the owners of both pet dogs and kennelled greyhounds (see Chapter 1, p.18 for detail on the differences between these donor animals) as well as veterinary professionals working in either first opinion practices or emergency referral practice. The reason for this purposive sampling was to allow for potentially different meanings of animal blood donation and animal blood use to emerge.

The table below details the interviews which were conducted in 2014/15.

STAKEHOLDER GROUP	NUMBER OF INTERVIEWS	INTERVIEW LOCATION	LENGTH OF INTERVIEW
Pet donor owner	21	Canine blood collection clinic	10-30 minutes
Kennelled donor owner	3	Greyhound kennels	30-120 minutes
Veterinary surgeon	4	Veterinary clinics	30-60 minutes
Veterinary nurse	2	Veterinary clinics	30 minutes
Total	30		

Table 2 Detail of interviews conducted during the empirical research phase

Specific detail on the interviews conducted with each group is included below, followed by an overarching discussion of interview agenda and style, consent and ethical approval. Please note that some aspects of what follows are also covered in Ashall and Hobson-West (2017).

Pet owners Access to pet dog owners was via a key contact at Pet Blood Bank UK who allowed access to some of their blood collection sessions. The two different UK locations attended were chosen to increase the geographic and socioeconomic diversity of the pet owners. All the dog owners attending each session were asked whether they would agree to be interviewed and the aims of the project were introduced with the help of an information sheet (Appendix 1). All interviewees provided written consent (Appendix 2) and were assured that their names would not be used in order to encourage an open and unreserved dialogue. All interviewees were female and had different degrees of experience in donating their pet's blood, with some presenting for the first time and others having made numerous donations. Most of the interviewees' pets successfully gave a donation on the day of the

interview, but a few had failed to donate on that occasion. The interviews were conducted in the post-donation area after the dogs had left the donation room; this strategy had the advantage that interviews occurred close in time and space to the actual donation process, but without interrupting it. The approach worked well and gave access to a good number of interview candidates who were eager to talk about their experience while waiting for their dog to be allowed home. The disadvantage of this strategy was that the time available for interview could not often exceed 20 mins. Length of interview was therefore partly determined by the need of the owners to look after their animals and leave the waiting area. The original project plan (partly inspired by Busby (2010)) had been to follow up these interviews with longer discussions for a sample of owners at a later date. However, the plan was revised once it became clear that the data generated through these first sessions was remarkably rich and informative, with recurrent and consistent themes being clearly identifiable.

Kennelled blood donor owners The kennelled blood donor owners were accessed by telephoning several greyhound rescue kennels from a contact list on the Retired Greyhound Trust website (RGT, 2017) and asking whether they would like to be involved in the research. The kennels visited were in three different UK locations and the interviews were conducted at the kennel or the owner's home at a mutually convenient time. The time taken travelling to the location and the more relaxed atmosphere tended to result in longer interviews than for the pet owner group. An identical interview guide was used but the semi-structured interviewing technique allowed for alternative themes to develop and these were followed as far as the interviewee chose to take them.

Veterinary surgeons were chosen from different types of practice according to the size, type of work and frequency of blood product use. One practice was a small mixed rural practice with little experience of blood product use. One was a three vet urban small animal practice which used blood products occasionally and also hosted blood collection sessions. The other practice was

a multi vet city centre emergency referral practice which used blood products very commonly and kept them in stock at the practice. The veterinary surgeons working in first opinion practice were previous professional contacts and the veterinary surgeons working in referral practice were identified through one advisory panel member[10]. A snowball sampling effect (Bryman, 2012) also led to several veterinary nurses indicating a willingness to be interviewed at the emergency referral practice although they had not been included in the interview plan. The same interview guide was used for both veterinary surgeons and nurses but their differing perspectives and experiences were allowed to emerge. Whilst the veterinary nurses provided fascinating data, because they were both from one veterinary practice their anonymity may have been threatened if they were identified as a separate group. Therefore, their interview data was analysed alongside the veterinary surgeons data under the broader heading of veterinary professionals.

Without exception all individuals who were asked if they would like to be involved with this research responded positively meaning that access was not a limiting factor for any stakeholder group.

An interview schedule (Appendix 3) was devised which included the ethical and social themes identified through initial research framing and the comparative ethical analysis. The schedule was developed in the form of open ended questions with several additional questions as follow up prompts where necessary. As such data collection was deductive to a certain extent, meaning the research was conducted with reference to theoretical ideas (Bryman, 2012). However, the interview process was meant to be as unstructured as possible; fitting the description of a *'conversation with a purpose'* (Burgess, 1984:p.102). This loose interviewing style effectively permitted unexpected or inductive themes to emerge, resulting in data collected by a combination of deductive and inductive processes. The same interview schedule was used for both pet donor owners and kennelled donor

[10] The advisory panel for this project are named in the acknowledgements. They were chosen for their different academic or professional interests in this research area.

owners in order to take a symmetrical approach to data collection for both groups. This allowed any differences in the data analysis to be likely to reflect their different situation and understandings rather than different questions having been asked. Similarly, use of the same schedule was extended to the veterinary professional interviews; substituting a consideration of 'blood donation' for 'blood use' but structuring the interview around the same deductive themes in a way which was appropriate to the context of each interview.

The pet owners were the first group to be interviewed, followed by kennel owners and veterinary professionals although there was some degree of overlap. The interviews were all tape recorded (with the consent of the interviewee) in order to allow a full focus on the interview. The recordings were all fully transcribed by a professional transcriber. Whilst the advantages of a researcher transcribing their own data in terms of early analysis and familiarity with the data are well understood (Atkinson and Heritage, 1984; Bird, 2005), the time commitment of transcription at up to 6 hours per hour of interview initially (Bryman, 2012) was prohibitive. A good relationship with the transcriber developed and communication was made about transcription preferences including the novel question of whether any conversation directed at the animal should be included. This data was included in the transcripts and a recent discussion of the significance of such data has since emerged in a publication which is relevant to this work (Ryan and Ziebland, 2015). Beyond this informal communication the level of exactness required in the transcription was not determined by formulaic rules, which are argued to only be justified in exceptional cases of sociological rather than linguistic research (Flick, 2014). Interviews were sent for transcription as soon as they were completed and the transcripts read as soon as they were available, meaning transcription and preliminary data analysis was an ongoing process. This led to later interviews being conducted after preliminary analytic themes had been identified which had certain advantages. The interview schedule was not piloted, although several iterations were worked on with the project

supervisors, and this consecutive process allowed for the development of interview technique and also for a later focus on specific emergent themes. This was particularly useful with the veterinary professional group, who were encouraged to respond to specific concerns or assumptions identified by preliminary analysis of the animal owner data.

The total number of interviews conducted (30) represented the limit of what was practically possible in terms of data collection and analysis for a PhD project which is only partly empirical. The uneven division of the data collected has a degree of practical rationale in that access arrangements for pet dog owners meant multiple interviews could be conducted during each blood collection session, whilst most other stakeholders had to be contacted and interviewed individually. The resulting large homogenous sample and three smaller samples (with the veterinary professional group being quite diverse) had analytic implications which are addressed in the next section. However, within the analytic frameworks described, the data collected was able to respond significantly to the research question and was also sufficient in quality and quantity to develop stand-alone social science outputs (Ashall and Hobson-West, 2017).

The data collection plan and interview schedule was approved by University of Nottingham School of Veterinary Medicine and Science Ethics Review Committee (July 2012, June 2014) and University of Nottingham Sociology and Social Policy Research Ethics Committee (July 2012).

Having described and justified the process of data collection the next section moves on to consider the analytical approach.

2.4.3 Empirical data analysis

There are numerous accepted methods for analysing qualitative data once it has been collected, including various options for both the practical management and theoretical interpretation of the raw data. It is important to be clear about the analytic choices made in this work because concerns about

validity and credibility can also be raised at this stage of the qualitative research process.

A fundamental question in deciding on analytic methods is the perceived ontological status of the research data. It is generally accepted that there are two distinct philosophical approaches to empirical research data. One is the realist or objectivist approach which argues that the world consists of universal truths or facts which may be extracted or uncovered by careful researchers (Bryman, 2012:p.32). An alternative view is held by constructionist or relativist researchers whose perspective is that research data does not access 'facts' but is just one of many possible versions of an event which has been co-constructed by the interaction of a particular researcher and a research subject (Dingwall, 1997). It is important to acknowledge that by choosing to rely on interview data alone rather than combining with observation in an ethnographic approach, implies a realist ontological position because it assumes that:

> People's knowledge, views, understandings, interpretations, experiences and interactions are meaningful properties of the social reality which your research questions are designed to explore (Mason, 2002:p.63).

That is to say, that the data collected during the interviews is assumed have real meaning within the context of the research. A realist analysis could generate critique from constructionists on the basis that the data may have little meaning outside the interview process (Silverman, 2013:p.282). The analytic process was therefore mindful of any opportunities to increase confidence in the empirical analysis. In much the same way as observation can be used to support or challenge the meaning of interview data in ethnographic research (Brink and Edgecombe, 2003), different sources of knowledge or data can be used alongside one another to increase confidence in the research findings through the process of triangulation (Bryman, 2012). Broad uses of this term have included the use of *'multiple observers,*

theoretical perspectives, sources of data and methodologies' (Denzin, 1970:p.310). Therefore, whilst a realist ontological approach is taken to analysing the interview data, the identification of similar social perspectives in written documents and publications and the use of relevant existing social theories may be seen as a broad form of triangulation within this work. Indeed, within the context of interdisciplinary research it might also be argued that the examination of consistent research themes across the two disciplines is a further route to increased research confidence.

Furthermore, whilst it must be accepted that empirical research will inevitably be affected by the researchers own views and perspectives, for this research conscious efforts were made to reduce researcher influence, for example by taking a semi-structured approach to interviewing, stressing the independent nature of the work and by taking a reflexive approach to the data analysis (the limitations of this strategy will be discussed later in the chapter).

Alongside a researcher's ontological assumptions, the aims of empirical data analysis are also fundamental to determining the appropriate analytic methods. The level of interpretation of empirical data reflects both what the researcher wishes to achieve and what the data is capable of representing. Murphy *et al.* (1999) describe how Strauss and Corbin (1990) outline three approaches to data analysis; representing an increasing gradient in data interpretation:

1. Presentation of data without analysis where "the informants speak for themselves", thus aiming to give what is regarded to be an "honest account with little or no interpretation".

2. Analysis which aims to provide an accurate description of the subject under study: this approach presents a "rich and believable" account where the commentary may also be of a theoretical nature.

3. Development of theory where conceptualisation of data and relation of concepts is undertaken in order to "form a theoretical rendition of reality". (Murphy *et al.*, 1999: p.276)

This approach is useful in highlighting that the researcher must rationalise the extent to which they analyse and theorise their data. The approach taken in this work includes examples of both moderate analysis and in depth analysis (relating to numbers 2 and 3 above) whereby some data sets are used as an 'accurate description of reality' but others, where possible, conceptualised and theorised. The rationale for the different degrees of analysis is discussed further below.

The first practical step in data analysis was to convert a large amount of raw data in the form of transcribed interviews into manageable research outputs through the process of coding, defined as:

> Generating an index of terms that will help you to interpret and theorize in relation to your data. (Bryman, 2012: p. 577)

There are several IT programmes available which are designed to assist with the processing, storage and analysis of qualitative data such as NVivo. However, being mindful of not having transcribed the data personally, early attempts to use this computer programme created an increased feeling of 'distance' from the data and a manual approach to data analysis was therefore chosen. Manually coding the data involved reading and then rereading the transcripts before making notes which highlighted important words, phrases or meanings within the interview data. At first there were very many codes and each interview introduced additional ideas. An Excel spreadsheet was used to organise the codes; storing the relevant extracts of each interview under the code heading. Thinking about how these codes might relate to each other or duplicate similar ideas allowed many of the codes to be grouped or several codes could be collapsed together.

The next step in the analysis process has been described as thematic analysis in recent years although the exact heritage and accepted methods involved in such an approach are not yet completely clear (Bryman, 2012). The identification of themes within qualitative data has long been recognised as part of other analytic methods such as grounded theory (Ryan and Bernard, 2000), but thematic analysis is now starting to be recognised as a stand-alone technique. Braun and Clarke for example describe how thematic analysis requires the researcher to reflect on the initial codes in order to gain an understanding of the continuities and linkages between them (Braun and Clarke, 2006).

When identifying themes from the codes, references to the normative research themes which had already been identified and used in the interview guides were considered, but unexpected linkages between the data codes were developed into themes or ideas that had not been anticipated. As such the data analysis, as well as the data collection, employed a combination of inductive and deductive approaches (Braun and Clarke, 2006). A thematic analytic approach was ideal for allowing reflection upon the relationships between the themes identified in the interview schedule and those which were introduced by the interviewees themselves.

The order in which the transcripts were analysed roughly followed that of the interviews themselves meaning that the pet owner interviews were analysed first, followed by kennel owners and finally veterinary professionals. This will inevitably have influenced coding and thematic analysis and in the empirical chapters there is a sense of dominance surrounding the pet owner data analysis in that the kennel owner interviews are often contrasted with them and the veterinary professional interviews are frequently used to respond to the pet owners' themes. This is not necessarily a problem for this research and indeed it may even represent a benefit of thematic analysis in that a focus on how the data themes from each group relate to one another is critical for developing the normative implications of the work. However, if the interviews had been analysed in a different order other aspects of the data

analysis may have been focussed on. In fact, the acknowledged scale and complexity of qualitative research data (Meyer and Avery, 2009) meant that the themes which are ultimately developed in the thesis represent only a part of what the data analysis revealed. This is due to the limitations of time and space but most importantly because the research agenda had determined that the empirical data was to be used for a specific purpose and in a specific way.

The number of interviews which were conducted for each group had both analytic rationale and analytic implications. The quantity of data generated by the first pet owner interviews was considerable and highlighted at an early stage that collecting excessive amounts of data would result in considerable wasted time for researcher and interviewees because so much of the data analysis would redundant. However, reduced numbers of interviews for the other groups resulted in unequal division of data quantity resulting in a large homogenous pet owner data set which could be analysed differently to that arising from the smaller groups. In qualitative research the term 'saturation' is used to describe *'the point at which gathering more data about a theoretical construct reveals no new properties nor yields any further theoretical insights'* (Bryant and Charmaz, 2007:p.611), reaching data saturation is often used by qualitative researchers to defend the number of interviews undertaken. A recent paper by Hannink *et al* (2016) argues that from their analysis of 25 interviews, code saturation (where the full range of thematic interviews was identified) was reached at nine interviews, whereas meaning saturation (where a richly textured understanding of the issues was developed) was reached at 16-24 interviews. In this thesis both code and meaning saturation were reached for the pet owner group only and this data set was therefore sufficient for detailed exploration and theorisation, leading to a peer reviewed social science publication (Ashall and Hobson-West 2017). The smaller data sets are unlikely to have reached data saturation, particularly the veterinary professional group which was by design highly varied in contrast to the homogenous kennel owner group. These data sets, whist very valuable,

are therefore interpreted to a much lesser degree (Murphy *et al.*, 1999) in the thesis and analysis is limited, aiming only to show the diversity of views which exist and how they may contrast with the pet owners' narratives. This careful analytic approach represents a robust use of the data collected and a very effective approach to answering the specific research questions. A much larger scale data collection would be necessary to provide an equivalent empirical analysis for the smaller groups to that undertaken for the pet owner group (see Chapter 8 for more suggestions for further research).

Finally, the empirical analysis for this thesis is not restricted to a consideration of the novel data analysis alone but also includes an exploration of potential theoretical rationales. Bryman (2012) claims that *'social research involves research that draws on the social sciences for conceptual and theoretical inspiration'* (p.5). Thus rather than utilising social science as merely an empirical research method, it should be understood as a broad academic discipline with its own theoretical and conceptual frameworks which can be used to structure and interpret robust empirical social research. The empirical analysis in this thesis uses social theory and concepts as well as the empirical data analysis in order to describe the reality of canine blood donation. Initial literature searches identified material from the social sciences which relates to the deductive themes and this literature positively influenced both the interview schedule and the analysis of the data (For example, sociological literature donation such as Corrigan, 2003; Lipworth *et al.,* 2011; Alaishushki *et al*., 2008; Pfeffer and Laws, 2006; Busby, 2010; Shaz *et al*., 2009; Burnell *et al*., 2015; Titmuss, 1970; Oakley and Ashton, 1997; Busby, 2004; Farrugia *et al*., 2010; Bednall *et al*., 2013). Furthermore, existing literature with relevance to the inductive themes was also considered and some potential theoretical or conceptual rationales explored (For example, sociological literature on human-animal relationships such as Charles, 2015; Fox, 2006; Latimer, 2013; Haraway, 2003; Haraway 2007). As such the empirical analysis chapters include considerable conceptual and theoretical discussion and therefore represent a robust example of sociological research.

Having described and defended the methodological approach to both normative and empirical phases of the research, the next section moves on to describe the aims and approach of the ethical framework and regulatory implications chapter.

2.5 Developing the ethical framework and UK regulatory implications

In Chapters 7 and 8 the normative and empirical findings are used to respond to the final research question: RQ 3 *What are the policy and wider implications of my findings?*

Initially Chapter 7 identifies examples of dominant ethical frameworks which aim to harmonise approaches to human living donation in a global context (WHO, 2010; ISBT, 2000). These frameworks are used as templates for an ethical framework facilitating donation decision making by the veterinary profession. In the process of constructing the veterinary framework the comparative ethical arguments developed earlier in the thesis and the refinements and additions necessitated by the empirical data analysis are reviewed and consolidated.

Regulatory approaches to human donation in the UK have been examined for their effectiveness in promoting specific ethical justifications (Price, 2012). The second part of Chapter 7 considers the implications of the proposed ethical framework for regulation of veterinary donation in the UK. The cases of canine blood banking and feline renal transplantation are explored because they are the only veterinary donation practices currently covered by specific UK regulation (RCVS, 2014). Policy documents, grey literature and media coverage are used to outline the complex and changeable nature of regulation in this area and to highlight the lack of specific ethical frameworks underpinning existing regulation. Finally, the proposed ethical framework is applied to both cases in turn and the resulting implications for current regulation are explored. The broader conclusions and implications of the thesis are then explored in Chapter 8.

In the next section of this chapter the overall research process is reflected upon and some specific achievements and limitations are critically considered.

2.6 Critical reflections on the research process

The chapter so far has detailed and justified the research approach and methodological choices, including any associated risks or criticisms identified in the wider academic literature. In this section a reflexive consideration of the research identifies some specific methodological challenges and achievements.

2.6.1 Reflections on the research approach and research outputs

The interdisciplinary approach in this research project represents a defining characteristic of the work and has resulted in considerable challenges and opportunities. Whilst the project had the support of experienced academics in both ethics and social science the relative novelty of empirical bioethics research, particularly in the veterinary context, meant that the structure of such a thesis had little precedent. Further challenges associated with taking an unusual research approach became evident when it came to thinking about the audience for the thesis, identifying appropriate examiners and contemplating how to present and publish the outcomes of the work.

However, the aims of the interdisciplinary research approach in terms of achieving 'a richer naturalistic ethics' (Parker 2009) are evident in the detailed ethical framework, contextual regulatory recommendations and the broader professional conclusions of the work. A significant achievement of the interdisciplinary approach is its success in maintaining the academic rigour of both disciplinary components, meaning audiences in both bioethics and medical sociology have welcomed the work (Ashall *et al.* 2017, Ashall and Hobson-West, 2017). As such, rather than identifying an 'interdisciplinary audience' this research has connected with several audiences, posing ongoing challenges and opportunities for the researcher.

The comparative ethical analysis is a methodological innovation of the work and successfully results in clearly structured and robust development of ethical arguments for the veterinary profession. Such an approach therefore offers a great deal in the way of transparency, repeatability and wider application within veterinary ethics. However, this approach also uncovers important and unanswered questions for veterinary ethicists concerning the role of the veterinary professional and the moral status of the animal 'patient' (Ashall *et al*., 2017). Ultimately, the comparative approach in this work rests upon assumptions concerning the moral responsibilities of a veterinary surgeon which are founded on previous work in veterinary ethics (Yeates, 2009; Coffey, 2008; Main, 2006) and existing codes of professional conduct (RCVS, 2014). These fundamental questions still deserve far greater attention and are likely to be the subject of greater debate in future years. Any development in understanding of the moral relationships between animals and veterinary professionals would have implications for the construction or application of comparative ethical arguments.

In a similar vein the ethical framework which is developed in the thesis cannot be taken as a permanent and irrefutable tool for animal donation decisions. The ethical arguments and empirical data analysis on which the framework is built are open to challenge or may change over time. Therefore, the framework should be seen as a much needed first attempt which should be reviewed and refined in light of new ethical argument or empirical research, as has already been the case for the human frameworks on which it is modelled (WHO, 2010; ISBT, 2000).

2.6.2 Reflections on the qualitative research

As with any study, the chosen empirical approach resulted in specific limitations and tensions. First, and most obviously perhaps, the purposive method of selecting interview candidates did not represent in an exhaustive and fully representative sample of all stakeholders. Reducing the stakeholder groups to donor owners and veterinary professionals was valuable because it permitted a particularly detailed analysis of their perspectives. However, the

limited insight these accounts gave into the positions of other stakeholders such as the blood bank and the owners of animals receiving blood was sufficient to indicate that a more holistic research project might develop additional significant research themes. This limitation can be viewed as one negative consequence of the interdisciplinary approach in that a PhD project which focussed either on ethical or empirical research would have been able to explore animal donation from that disciplinary perspective in much greater detail. By focusing on accounts of the 'donation' more than the use of donated tissue, this work has significantly developed understanding of the stand-alone benefits of animal donation (Ashall and Hobson-West, 2017). These novel findings, which have considerable broader implications, might not have emerged from an analysis of narratives which initially assumed a greater link between the donation and use of animal tissue.

Second, the fact that most pet owner interviews were conducted at the veterinary clinic means that other family members, who may have had a role in deciding to donate (or may even disagree with donation), were excluded. A more relational analysis of this topic (Mason, 2004) might therefore illuminate different aspects of animal donation decision making. Given the unexpected themes that emerged around pets as family and proxy donors , it is also interesting to consider how much further these themes might be developed if longer interviews were to take place in a more familial setting such as the pets' homes. Furthermore, whilst it was stressed during the interviews that the research was independent I was also open about my background as a veterinary surgeon with experience working in an animal blood bank. This, combined with the location of the pet owner interviews, may have encouraged interviewees to closely associate the project with the veterinary community. This is not necessarily a problem for this study, although the optimism of the pet owners should be viewed with this limitation in mind. It may also be worth reflecting on whether this could potentially influence future research with non-donors, as they may feel less able to be critical of blood donation. For other vets undertaking qualitative

research the question of whether full disclosure is a requirement for ethical research should be weighed against the possibility that identifying as a veterinary professional may influence the interviewees' accounts in specific ways.

The contested role of the researcher in constructing interview data and the implications of a positivist approach have already been discussed and it is therefore important to be reflexive about the specific influence my background as a veterinary surgeon and my experience working for an animal blood bank will have had at both the data collection and analysis stages. Whilst my background had very positive implications with regards to access, framing the empirical research and conducting purposeful interview conversations, it will also inevitably have resulted in my forming opinions and preconceptions concerning this particular clinical scenario. As such this work has to be taken as my own analysis of the subject and the nature of empirical social scientific work means that another researcher with different ideas, preconceptions and agendas might create an alternative account from the same data or might collect different data from identical interviewees. However, a professional researching their own area of expertise is also uniquely situated to tailor a problem oriented research approach. The intentional positioning of stakeholders as researchers in specific social situations has long been recognised as the field of 'action research':

> The term "action research" was introduced by Kurt Lewin in 1946 to denote a pioneering approach toward social research which combined generation of theory with changing the social system through the researcher acting on or in the social system. The act itself is presented as the means of both changing the system and generating critical knowledge about it (Susman and Evered, 1978:p. 586).

Whilst this research was not intentionally planned as action research, the benefits of my position as a stakeholder in terms of developing the problem

based research approach and research outcomes must be acknowledged alongside any implications for impartiality.

Conducting any empirical research results in inevitable limitations and these may be felt most acutely where the audience is unfamiliar with the research techniques. For instance, within a scientific community used to quantitative methods the generalizability of the research findings is often considered important. However, the repeatability or population frequency of the identified empirical perspectives in this work could only be established by using quantitative methods. Again it is important to reflect on the suitability of the chosen methods for the specific research questions asked; it is not necessary to show that all, or even most stakeholders have a particular perspective for that perspective to be relevant to a specific ethical argument.

Finally, a further criticism of qualitative research relates to the validity and reliability of data analysis. Silverman (1997) describes the problems faced by qualitative researchers in this regard:

> When presenting results, qualitative data analysts will suggest that certain patterns recur, that perhaps a certain sequence of events can be observed and that the patterns and events have the meanings ascribed to them; that is, that they are valid. In this process there is sometimes little capacity to determine the extent to which the interpretations of the data reflect the situations or events that occurred, whether other unreported data might contradict the findings, and the extent to which the findings reflect the personal qualities of the researcher. This not only creates a degree of uncertainty about the validity of the data but it also leaves unanswered questions about its reliability. (Silverman, 1997: p.20)

Silverman's candid assessment of the critiques of qualitative methods invite a simple response which is that rather than focussing on methods, questions of validity and reliability can only be answered by the researcher themselves through their analysis of the data. Silverman concludes that:

> If there is a 'gold standard' for qualitative research, it should only be the standard for any good research, qualitative or quantitative, social or natural science. Namely, have the researchers demonstrated successfully why we should believe them? And does the research problem tackled have theoretical and/or practical significance? (Silverman, 1997:p. 25)

Silverman raises an important point through stating that the same concerns should be at the forefront of every researcher's mind, meaning that quantitative research, whilst more familiar to the veterinary profession, should not be considered immune from criticism concerning its validity or credibility. Indeed, it has also been suggested that *'We need a moral and methodological community that honours and celebrates paradigm and methodological diversity'* (Denzin, 2010: p.425).

To summarise the limitations of this thoughtful yet ambitious and innovative research approach, Buchanan (1992) details when research should be considered credible and significant:

> [Quality] cannot be determined by following prescribed formulas. Rather its quality lies in the power of its language to display a picture of the world in which we discover something about ourselves and our common humanity. (Buchanan, 1992:p.133)

Notwithstanding the detailed methodological planning and reflexivity which this chapter has described, in this sense it may be argued that the quality of this research will hopefully speak for itself.

2.7 Conclusions

This chapter has described and defended the methodological choices and processes employed in the research project, arguing that they represent the most appropriate way to respond to the main research questions. The

chapter began with the rationale for choosing an interdisciplinary research approach; embedding the decision to combine ethical and empirical research in clinical experiences as a professional in the field. The consequences of this approach in terms of necessitating a non-standard use of literature and an alternative thesis structure were highlighted.

The emerging academic field of empirical bioethics was introduced (Borry *et al.,* 2005; Molewijk and Frith, 2009; Parker, 2009; Hedgecoe, 2004; Frith, 2012; Garrard and Wilkinson, 2005) and its aim to produce a richer naturalistic ethics was considered alongside the challenges to research validity which are posed by the merging of two disciplines. Examples of recent work which takes an empirical ethics approach were examined (Lipworth *et al.*, 2011; Burnell *et al*., 2015) and the specific interdisciplinary approach taken in this thesis was described.

The rationale for and process of comparative ethical analysis was described next before the empirical research phase was introduced. The value of qualitative methods for developing knowledge of the meaning of animal donation practices was argued and the rationale for collecting interview data from specific stakeholder groups was discussed in terms of both practical limitations and the research aims. Data collection was described in considerable detail including the selection of interview candidates, access, interview locations, the development and use of an interview schedule, data recording, data transcription, consent and ethical approval.

The empirical data analysis was described and justified in terms of its ontological perspective, interpretative aims and the practical processes of coding and thematic analysis. The limitations of the chosen empirical methods were discussed alongside their appropriateness for this particular research project. Finally, following an account of how normative and empirical outcomes were used in the development of the ethical framework, some specific challenges and limitations of this research approach and how they are addressed were reflected upon.

The next chapter of the thesis commences the ethical analysis through exploring the justificatory arguments for human living donation practices.

3. AN ETHICAL ANALYSIS OF LIVING HUMAN DONATION

3.1 Introduction

The first research question is considered in this and the following normative chapters:

> **RQ1: To what extent can the ethical justifications for living human donation be applied to living animal donation?**

A specific focus on donation by medical ethicists supports the assertion that the ethics of donation and transplantation is unique:

> What is truly distinctive about transplantation is not technology or cost, but ethics … The balancing of the interests of the 'giver' and 'receiver' is the great challenge for those attempting to regulate in this sphere (Price, 2000:p.2).

Human donation practices are therefore understood to require specific ethical justifications and these justifications are the subject of considerable ongoing academic examination and critique. The existence of a considerable body of work which is specifically focused on an aligned area of human medicine has driven the comparative approach to exploring the ethics of veterinary donation. Whilst Price's assertion that transplantation is ethically unique relates specifically to solid organs he also concedes that:

> No bright dividing line exists between such organs and other human tissues in many of the relevant ethical and legal concerns (Price, 2000:p. 4).

In this comparative analysis the ethical justifications for the living donation of both renewable and non-renewable tissues are examined concurrently[11].

[11] It is later argued that this is necessary due to difficulties in extending the distinction meaningfully from the human medical setting to the veterinary context.

Therefore, this chapter explores the two overlapping justificatory arguments which currently support all human living donations: donor informed consent and donor best interest. The theoretical underpinnings of these arguments are identified in order to later evaluate their applicability in the context of veterinary donations.

The justification of donor informed consent is examined first, its meaning and purpose is identified before the criteria for valid consent and the scope of authority of consent to living donation are examined. Whether and when donation practices might be considered harmful to human donors is explored next and the potential physical, non-physical and wider harms arising from living donation are identified. The benefits which exist for living human donors are identified and analysed alongside the complex conceptual and empirical questions which donor best interest arguments create.

Chapter 4 takes the findings of this analysis and systematically relates them to the veterinary context, considering how the theoretical and conceptual underpinnings of arguments supporting living human donation might enable them to be applied or adapted to the veterinary situation.

The ethical analysis of human living donation now commences with an examination of donor informed consent.

3.2 Informed Consent

The significance of informed consent to the justification of living donation is uncontested:

> For competent people it is overwhelmingly accepted that their valid consent is a necessary condition for morally permissible [organ] retrieval (Wilkinson and Wilkinson, 2015).

As much as there appears to be consensus among ethicists regarding the value of informed consent to living donation, the policy and practice relating to living donation in humans worldwide is also dominated by the justificatory

argument of donor informed consent. The International Society of Blood Transfusion (ISBT) produced its current Code of Ethics for Blood Donation and Transfusion in 2006 and this has subsequently been adopted by the World Health Organisation. The code states that:

> The donor should provide informed consent to the donation of blood or blood components and to the subsequent (legitimate) use of the blood by the transfusion service. (ISBT, 2000:Code 1)

Similarly the World Health Organisation's Guiding Principles on Human Cell, Tissue and Organ Transplantation, endorsed in 2010 states:

> Live donations are acceptable when the donor's informed and voluntary consent is obtained … Live donors should be informed of the probable risks, benefits and consequences of donation in a complete and understandable fashion; they should be legally competent and capable of weighing the information; and they should be acting willingly, free of any undue influence or coercion. (WHO, 2010:Guiding Principle 3)

These statements introduce many of the elements of informed consent that this section explores, and show that donor consent is of critical importance to the justification of living human donations. In this section, the purpose of informed consent is explored, before the criteria which are necessary for valid consent to be given are identified. Finally the scope of authority of informed consent for living donation specifically is examined.

3.2.1 Bodily rights and consent to living donation

Consent is the mechanism though which human beings exercise their rights of determination over their own body. The ethical significance of protecting bodily rights appears multifaceted, with medical ethicists promoting consent as valuable in many ways. Initially consent was considered important in protecting the patient from overzealous or paternalistic medical intervention and therefore promoting the overall good for the patient (Mill, 1990:p. 215).

In the 1970s, however, an influential view of consent as valuable in protecting the autonomy of patients emerged in work by many ethicists, including Ruth Faden, Tom Beauchamp and James Childress (Eyal, 2012). This dominant view of the value of patient consent will be explored more fully below. Additional but perhaps overlapping arguments for requiring a patient's consent include the prevention of assault, coercion or exploitation (Manson and O'Neill, 2007:p.75), the maintenance of trust between patients and medical professionals (Bok, 1999) and self-ownership arguments (Archard, 2008).

In donation ethics specifically, it has recently been affirmed that informed consent has become synonymous with a patient's rights to bodily integrity:

> Ethical thinking about transplantation is dominated not by rights, but by the ideas of donation and consent. However, donation presupposes that the organ is the person's to give, not no one's or someone else's or a resource for social use; and the emphasis on consent implies that people have rights to give or withhold consent (Wilkinson, 2011:p.12).

Wilkinson suggests that it is possible to answer many of the ethical questions raised by the procurement of organs by thinking through the rights people have and how they fit with the interests of other people. That human beings possess bodily rights is suggested to be widely accepted and almost entirely uncontroversial (Wilkinson, 2011).

In line with supporters of the 'self-ownership' argument for informed consent the relationship between presumed bodily rights and the requirement for consent to donation is also sometimes framed in terms of 'ownership' of body parts. Price (2000) points out that:

> If our bodies were the property either of the state or of a sick individual we would seemingly be obligated to donate at least some body parts or tissues (Price, 2000:p.233).

Price argues that the existence of bodily rights, and the requirement for consent, indicates that humans do have moral ownership of their own bodies. What is interesting about Price's statement is that it highlights how the existence of human bodily rights prevents enforced donation in the interests of society or a sick individual.

It is a very significant theoretical point that despite the need to balance harms to one individual against benefits to another in living donation, consequentialist justifications are not generally visible. Consequentialist theories such as Utilitarianism justify actions based on their consequences (Bentham, 1789), thus if a harmful procedure results in a net benefit it may be permissible. Consequentialist arguments differ greatly from rights arguments in that they do not focus on benefits or harms to be caused to individuals; the outcomes for all moral actors are of relevance to decision making such that harms to one individual might be offset by benefits to others. Such arguments are, of course, used in some medical contexts such as public health and the allocation of health resources, but in general, utilitarian reasoning is not prominent in medical ethics. Indeed Gillon (1985) states that *'if overall maximisation of welfare is the supreme moral objective, the individual seems to be in permanent jeopardy before the overriding interests of society (p.25)'.*

Utilitarian arguments have been explored in the donation context, for example, philosopher John Harris caused controversy with his theoretical exploration of a 'survival lottery'. In this paper Harris (1975) argued that consequentialist reasoning might justify the random selection and humane sacrifice of one individual periodically, in order that all their healthy tissues and organs might be harvested and used to save many more lives. Of course the lack of respect for individual human life and concepts of choice made such a proposal unappealing to our society, but Harris's work is important in illustrating the influence different ethical theories have on policy solutions for the moral questions raised by human donation. Whether utilitarian justifications might be considered more appropriate for animal donations will be discussed in the next chapter.

The theoretical rationale behind the justificatory argument of informed consent for living donation is, of course, deontological; being centred upon the existence of moral 'rules' or constraints which have inherent value, meaning actions are not judged solely in terms of their consequences. Following the notion of 'moral laws' which relate to all individuals and all circumstances, Kantian or absolutist arguments might suggest that an individual has the right not to be harmed in any circumstance or for any purpose (Rawls, 1989). However, ideal Kantian philosophy is critiqued by many including deontologist Ross who introduced the notion of numerous prima facie duties, which may take priority over each other in terms of their importance (Ross, 1939). Ross's perspective on the role of intuition and natural science in theoretical ethics, in particular, has been credited with a resurgence of interest in his work (Audi, 2004). A non-absolutist deontological approach appears in line with the generally accepted notion of human rights and develops the question of living donation in the medical setting by indicating that a patient may also have rights to request harmful medical interventions.

This section has argued that fundamental rights over the human body are widely acknowledged to exist and they are protected by informed consent in medicine generally and in living donations specifically. It was pointed out that the theoretical rationale behind the ethics of living human donation is predominantly deontological, not utilitarian.

Whilst Chapter 4 will later argue that donor informed consent cannot play the same role in justifying living animal donations, the detailed examination of autonomy, validity and third party consent which follow in this chapter will all be shown to have relevance for adapted ethical justifications in the veterinary setting. In the next section the idea of living human donors choosing to be harmed is developed through a consideration of the principle of autonomy.

3.2.2 Autonomy and the validity of consent

In this section the principle of autonomy is examined. Its historical and contemporary meanings are discussed before the significance of autonomous decision making to the validity of consent is explored.

Autonomy and individuals

Whilst bodily rights have a role in protecting the human body from unwanted invasion, in medical treatment and living donation it may be argued that the donor wishes to choose a specific invasion of their body. The commonest way to think about a person's ability to decide what to do with their own bodies is in terms of their autonomy (Harris, 1985; Beauchamp and Childress 2013). It has been shown above that informed consent may be viewed as the mechanism through which the rights of donors are respected (Wilkinson, 2011, Price; 2000). This section argues that valid consent must reflect a genuinely autonomous choice, leading into critical ethical questions surrounding how an autonomous choice is defined and what criteria must be fulfilled for consent to be valid.

Philosophers Harris (1985) suggests that '*people are said to be autonomous to the extent to which they are able to control their own lives, and to some extent their own destiny, by exercise of their own faculty* (Harris, 1985:p.195). The synonym of 'self-rule' is commonly used in medical ethics and this particular view of autonomy has become embedded in the body of work which connects informed consent with patient autonomy:

> Personal autonomy encompasses, at a minimum, self-rule that is free from both controlling interference by others and from certain limitations such as an inadequate understanding that prevents meaningful choice (Beauchamp and Childress, 2013:p.100).

The definition of autonomous choice as free from controlling influence and including adequate understanding is widely accepted and has been greatly influential in the development of informed consent processes. However, this definition differs from many in bioethics (Dworkin, 1988:p. 101) which has

prompted some to question the dominance of traditional approaches to autonomy in contemporary medical ethics (O'Neill, 2003). Of particular concern is the emphasis placed on the individual and the unrealistic requirement for complete freedom from external influence.

In donation ethics specifically, disagreement over this traditional definition of autonomy has been recently used to challenge the value of informed consent to living donation:

> There is growing dissatisfaction with the idea of autonomy as an isolated and individualistic concept, which presumes that we exercise our self-rule independently of others. More relational accounts suggest that autonomy is both constrained and facilitated by others (Bailey and Huxtable, 2016:p.121).

This perspective rejects an individualistic definition of autonomous decisions (and thus consent); suggesting that autonomous decisions may encompass much more complex relational reasoning:

> A vocabulary of rights and autonomy can be inadequate to represent the intimate bonds of family and friends, the delicate balance between sacrifice and self-interest, and the complex, often awkward relationship between doctors and organ donors or research subjects (Elliot, 1995:p.91).

Here, the nature of the relationships between the stakeholders in donation decisions is used to challenge justifications based solely on rights and autonomy. This particular question surrounding the significance of the relational aspects of donation decision making will be explored in light of the empirical data analysis later in the thesis (Chapter 6). For the time being the point to be made is that the meaning and value of informed consent processes hinge upon how patient autonomy is defined, and that the comparative complexity of human relationships in donation decision making may upset traditional individualistic approaches.

In summary, this section has shown how the principle of autonomy relates to a patient making decisions concerning their own body. Traditional definitions of autonomy focus on freedom from external influence and appropriate understanding, but this individualistic approach has been challenged, both generally and specifically in the context of living donation. The next section further explores the identified validity criteria for autonomous consent of understanding and voluntariness, before considering the provision of non-autonomous consent.

Informed consent; capacity and information

In accordance with the proposed requirement for adequate understanding in autonomous decision making, informed consent depends upon both relevant information being provided and the patient having the mental capacity to process it (Beauchamp and Childress, 2013). Ethical analysis of informed consent therefore scrutinises both the mental capacity of the individual and the quality of the information they are provided with.

Two groups of individuals are generally accepted to lack the capacity to provide full informed consent for both medical treatment and donation; mentally incapacitated adults and children[12]. However, there exists a grey area where individuals whose capacity is less than that of a normal adult human may still wish to make their own medical decisions. This problem was addressed in the ground-breaking case of *Gillick v. West Norfolk Area Health Authority* [1986] AC 112 which found that in the case of a child less than 16 years of age:

> Where a doctor was providing medical treatment which had been determined to be in the child's best interests it could be provided to the child if she consented and was competent (Herring, 2010:p.71).

The outcome of this judgement was recognition that a child's ability to consent or refuse treatment depends on their capacity to understand the

[12] It will later be argued that such individuals can sometimes be used as living donors even without their consent, according to the donor best interest argument (see section 3.3.3).

nature, purpose and consequences of the proposal. A child's capacity to consent to medical treatment is determined by them fulfilling the criteria set out in the Gillick judgement and a child who meets them is 'Gillick Competent' (Larcher & Hutchinson, 2010). This type of competency is considered to relate solely to the medical issue in question; a child may be considered competent to make a specific medical decision even if they are not fully competent in other ways. This recognition of competence as a situation specific concept will be important when considering arguments for and against capacity in animals (Chapter 4). The judgement also introduces an additional important concept by suggesting that such medical interventions must, in all cases, be in the best interests of the child and this point will be explored in more detail when the best interest justification for human living donations is examined (section 3.3.3).

The concept of competent or 'Gillick Competent' children has been applied specifically to living donations in a similar manner to that described above. Wilkinson (2011) argues that he can '*see no good reason for treating competent children who want to donate any differently from adults who want to donate*' (p.140). A point for later consideration in the animal context (section 4.2.3) is that competence in donation decision making appears to be more critical than the provision of full informed consent, meaning a lack of capacity rather than an inability to provide consent is considered the critical issue for human donors.

In addition to capacity, the second requirement for full understanding is access to the required information. For informed consent it is understood that a patient must have the nature of the proposed treatment, intervention or research explained to them, together with an adequate explanation and discussion of the potential harms and benefits which may result (DelCarmen and Joffe, 2005). However, in the context of living donation, applying such general principles may not be sufficient because of the difference in nature of the surgical procedure: that it is not being conducted for the benefit of the donor themselves (Morris, 1998). Indeed, Price highlights that most US states

have legislation that provides specific guidance concerning disclosure for living donors (Price, 2000:p.271).

For example, the type of information which must be disclosed to living donors is explicitly defined in the WHO guidelines as *'the probable risks, benefits and consequences of donation in a complete and understandable fashion'* (WHO, 2010:p.3). The point to be made here is that the information which should be disclosed to living human donors is not identical to that which is normally disclosed to patients undergoing therapeutic procedures; the non-therapeutic nature of the donation procedure means that additional factors such as the intended use of the tissue and the benefits which its use might achieve are also likely to be relevant to a donor's autonomous decision making.

Medical ethicists have long been interested in the possibility that consenting parties may not be given adequate information or may not fully understand the proposed medical treatment and, therefore, might not be providing valid consent (Byrne *et al.*, 1988; Lavelle-Jones *et al.*, 1993; Stanley *et al.*, 1998). Concerning donation specifically, Lipworth *et al.* (2011) argue that it is not possible to provide adequate information to donors contributing to biobanks because much of the research which will be conducted on the donated tissue is as yet unplanned, their point that the eventual use of donated tissue may not be well communicated appears relevant to all living donations. Consent processes for the donation of eggs have also recently been scrutinised, with Cattapan (2016) showing that Canadian clinics are not providing women with the basic information that they require to make an informed choice.

Finally, recent work in the social sciences has argued that social factors such as fear, trust, optimism and power inequalities can also prevent a full understanding of medical information (Corrigan, 2003). The complex emotional and relational aspects of living donation would appear to make such concerns particularly relevant to consent for living donation.

The inclusion of empirical studies (Lipworth *et al*., 2011; Cattapan, 2016) in this section highlights that how well informed donors giving consent are has a

significant empirical perspective (which is returned to in Chapter 5). From a conceptual perspective the point raised here is that any decision which is made without sufficient understanding, either due to limited capacity or the inadequate provision of information, is not autonomous and consent given on such a basis is likely to be ethically invalid.

Voluntary consent; intention and influence

Voluntariness is the other key element of autonomous decision making and also therefore, of valid informed consent. In the health context significant barriers to voluntary choice have been suggested to include coercion, inducement and 'no choice' situations (Eyal, 2012). Some of these barriers have been specifically identified in the context of living organ donation and the complex social setting of donation decision making may be argued to create a unique environment where multiple influences commonly converge.

Voluntary decision making is specifically required in global ethical frameworks concerned with living donation; defined as '*acting willingly, free of any undue influence or coercion* (WHO, 2010: Guiding Principle 3)'. The frameworks are also explicit about one particular circumstance which may negatively influence voluntary decision making in living donation:

> Cells, tissues and organs should only be donated freely, without monetary payment or other reward of monetary value. (WHO, 2010: Guiding Principle 5)
>
> Blood donation shall … be voluntary and non-remunerated: no coercion should be brought to bear upon the donor. (ISBT, 2000: Code 1)

Whilst payment for organs is illegal in many countries, some countries such as Iran and Pakistan do operate legalised commercial markets in organs (Rizvi *et al.*, 2009) which have been heavily criticised due to concerns over exploitation and profiteering (Adair and Wigmore, 2011). However, a minority of authors maintain that it is the organisation and governance of such systems which are

inadequate and that the concept of paid donation is ethically defensible (Harris and Erin, 2002; Stacey-Taylor, 2005).

Whilst payment for organs is relatively uncommon, the ethical debate about whether donors should be paid for renewable body products, especially blood, features prominently in discussions of the ethical significance of altruistic donations (Wilkinson, 2003). Furthermore, that some states in the USA do pay donors for blood donations is likely to be a significant factor in the decision of the American Association of Blood Banks not to support some aspects of the ISBT Code of Ethics (Beal, 2002). The influence of reward on voluntary decision making and the boundaries between encouragement and inducement clearly have an important empirical dimension; motivation and reward in living donors will be returned to in some detail in Chapter 6.

Unlike the overriding policy focus on payment, ethical consideration of voluntary decision making and consent to donation is more nuanced than a consideration of solely financial persuasion. When examining consent practices applied to the donation of eggs, Cattapan (2016) argues that in addition to poor information provision, the conflicted position of physicians who are responsible for both donors and recipients creates a questionable environment for voluntary consent, raising the potential for medical staff to influence decision making and thus reduce voluntariness. Valapour *et al.* (2011) present retrospective survey data to raise concerns over less than ideal understandings of the risks associated with living organ donation and evidence that donors frequently feel under pressure to donate, particularly when they are related to the potential recipient.

Wilkinson agrees that in living organ donations a variety of social tensions could have significant effects on the voluntariness and therefore validity of donor consent: *The extent to which social pressure undercuts the validity of donation is not just a matter of the effectiveness of pressure in getting someone to agree; it is also a matter of the nature and source of the pressure* (Wilkinson, 2011:p. 131). Wilkinson concludes that we do not currently have a

clear view of how or when such social pressures undercut voluntary decision making. There is clear scope here for empirical data analysis, such as that explored in Chapters 5 and 6, to have a significant impact on ethical understandings of living donation.

In summary, medical ethics literature argues that decisions which are not voluntary because they are unintentional or subject to (undue) influences are not autonomous and consent given on such a basis could be considered invalid. For living donation specifically, both payment and social pressure have been identified as posing a risk to voluntary donation decision making. In the next section the implications of non-autonomous or invalid consent are explored.

Non autonomous consent

Beauchamp and Childress (2012) identify one of the great difficulties associated with reliance on informed consent procedures to adequately protect patient autonomy. They suggest that there are two different meanings of the term 'informed consent': the first describes the genuine 'autonomous authorisation' of a clinical intervention or research as has been discussed above, but informed consent can also be used to describe a procedure which conforms to social rules of consent but which may not result in respect for a patient's autonomy. It is suggested that such a situation exists, for example, if an institution applies a poor approach to its definition of informed patient consent (Beauchamp and Childress, 2013:p. 122). Recent literature supports this claim, raising concerns that:

> Consent … risks becoming overly proceduralised; a tick box exercise that exists solely to ensure that a medical practice is aligned with prevailing professional requirements (Dunn, 2016).

Such an argument raises further empirical questions concerning whether accepted informed consent processes do, in fact, always represent an autonomous choice, and this question will be considered again in the empirical chapters. The difference between publicly accepted and morally

valid consent is an important distinction which has been applied to the ethics of living donation (Wilkinson, 2011:p.22). Whether legally valid consent is obtained is an important question, but it does not necessarily follow that donor rights have been protected; this is the distinction between morally valid and publicly accepted consent.

This section on autonomy and the validity of informed consent has considered the purpose and meaning of autonomous decision making and explored the validity criteria of understanding and voluntariness in informed consent. The risk of non-autonomous consent being accepted was also identified. In donation ethics specifically, Guttman and Gerok (1997) suggest that *the main concern of international legislation in living organ donation is to ensure that informed consent to the removal is voluntarily given by the donor* 1997:p.317). However, Price (2000) argues that both informedness and voluntariness may be particularly problematic in the specific context of living organ donor transplantation.

The next section moves on to consider the scope of authority of informed consent in the justification of living donations.

3.2.3 Scope of authority and consent to living donation

An introductory point to this section bridges the gap between a consideration of the validity of consent and its authority. In the context of living donation Wilkinson asks:

> What follows if agreements are invalid? We should avoid the mistake of assuming that, when a person's choice is not voluntary, he should not get what he chose. Perhaps what he chose non-voluntarily is in his interests …. But the tricky cases occur when personal sovereignty appears to conflict with well-being (Wilkinson, 2011:p.135).

Two distinct points which reduce the authority of donor informed consent are made here: That donation might be justifiable even without valid consent because it is still in a donor's interests, furthermore, that valid consent might

sometimes conflict with what is understood to be in a donor's best interests. Clearly then, despite its importance, informed consent is not a panacea for justifying all living human donations. This section explores potential limits to the moral force of informed consent.

Justifiable uninformed consent?

That donors' decisions might be ethically justifiable even when their consent is theoretically uninformed is an idea that is gaining ground. In the early days of living kidney donation Fellner and Marshall (1968) observed that kidney donors described their own decision making as 'irrational'. More recently, Valapour *et al.* (2011) argued that a high percentage of living donors do not understand the psychological risks, long term medical risks or financial risks of donation. However, these donors indicated that only their understanding of the effects of living donation on the organ recipient would affect their decision to donate if it were made again.

These observations are interesting because they appear to indicate an asymmetry between the importance of harms and benefits to living donor decision making. That donors may make their decision based on what appear to them to be significant benefits for others (and perhaps themselves), in spite of considerable, unexpected or unclear risks, seems to challenge the ideal of donor informed consent as a carefully considered judgement. In Chapter 6 this central question of what really motivates individuals to donate will be explored in some depth. The empirical data analysis will make a contribution to the complexity of this particular debate through indicating that psychological benefits for donors appear in some ways to be disconnected from the actual outcomes of the donation and can even be experienced by those who are giving consent for another individual to donate (Ashall and Hobson-West, 2017).

With regards to consent it is clear that what is important to donors may still be poorly understood and that their lack of understanding or disregard for some details of the donation process may not actually undermine the

voluntariness of their decision making. What is particularly interesting for this thesis is how the ethics of such a scenario might be altered when the consenting party is not the one donating.

In conclusion, the ethical point to be made is that empirical data is relevant to the validity of consent processes in a cyclical manner: not only can such data determine from the consent which has been given whether donor decisions were actually autonomous, but it may also be used to define the information and values which such individuals regard as necessary to the protection of their autonomy. The next section considers whether there are any limits to the degree of harm which donor informed consent might justify.

Thresholds of harm and consent to living donation

The use of consent to justify the removal of living tissue for donation has been described as '*unique*' by virtue of the non-therapeutic nature of the procedure (Morris, 1998:p.96). Much of the discussion concerning the validity of consent so far relates to efforts to ensure that the donor is not harmed to a greater degree than they are prepared to accept. What happens if the donor wishes to choose to harm themselves to a greater degree than the consent process permits?

Such situations are uncommon but the existence of 'thresholds of harm' make certain donation practices impermissible, even with donor consent. For example, procedures which might cause the death of the donor or which would severely affect their quality of life, such as the living donation of both kidneys, have reportedly been requested but refused by medical teams (Usborne, 1998). The ethics of a similar theoretical scenario have been very recently examined and the total prohibition of dual living kidney donation challenged by Bailey and Huxtable (2016) who argue for:

> Broader interpretations of the concepts of autonomy and welfare, recognizing the importance of relationships and the relevance of more than merely physical well-being. Equipped with such a holistic

> assessment, we suggest there is a prima facie case for allowing 'dual living kidney donation' (Bailey and Huxtable, 2016:p.119).

Bailey's argument ties in with previously made points concerning the poorly understood motives of living donors and the complexity of the social settings in which such decisions are commonly made. In line with the conclusions of much of this section it seems that a great deal rests upon accepted definitions of autonomy and the role of emotional and relational 'benefits' to donors. If the individual focus of autonomous decision making were to be successfully challenged, and the psychological benefits which donors seem to value at the expense of their own wellbeing are formally recognised, it would seem that even living donations which resulted in the death of the donor might be argued to be permissible.

Whilst consent may not justify harm to organ donors over a certain threshold, consent for the donation of blood and other renewable tissues appears to have considerable authority in that consent alone (without additional requirements for donor benefit) is considered a sufficient ethical justification (ISBT, 2000). Thus an ethically significant threshold of harm appears to exist between the donation of renewable and non-renewable tissues. This seems reasonable given that the donation of non-renewable tissues leaves the donor in an altered physical state but it also creates a potential risk in that the donation of renewable tissues may be considered less harmful in all circumstances. For example, it could be argued that the lack of children and non-competent adults as blood donors is simply a pragmatic matter of there being sufficient consenting adult donors, and that the accepted harm threshold between renewable and non-renewable tissues may be used to argue for children as donors of renewable tissues where necessary. Indeed, children are used as donors of bone marrow and Ross (1998) suggests that the forced removal of bone marrow from a competent child who dissents may be permissible because the child may benefit in the long run, but that a kidney may not be retrieved under the same circumstances. In such cases, and comparable examples of animal donation, it is later argued (Chapter 4)

that thresholds of harm which consider only whether the donated tissue will regenerate may fail to adequately consider the significance of other potential physical and psychological harms.

In summary, donor consent has historically been rejected as a justification for organ donation which would cause the donor significant harm, although this has been recently challenged by medical ethicists (Bailey and Huxtable, 2016). A harm threshold also appears to be accepted between the donation of renewable and non-renewable tissues which gives consent a greater authority in the former case. However, it is argued here that this may set a dangerous precedent if the donation of non-renewable tissue is considered, by definition, to always cause little harm.

In the final section on the scope of authority of donor consent, the situation of living donors who cannot consent is considered.

Assent and consent provided by a third party

In the second half of this chapter the justification of non-consensual living donations using a 'donor best interest' argument is considered. Here the relevance of 'assent' in the non-consenting donor and the scope of authority of consent given by a third party is explored. Whilst non-consensual donors are uncommon in human medicine, their use has been explored academically and in the context of veterinary donation where all donors are non-consenting, this existing work becomes very significant.

The term 'assent' is used in literature associated with paediatric research, nursing and paediatric and geriatric medicine. It aims to describe the 'agreement' (or disagreement which is termed dissent) of a patient or research subject to the extent to which they are capable, when they are not able to provide full valid consent:

> Informed assent means a child's agreement to medical procedures in circumstances where he or she is not legally authorised or lacks

> sufficient understanding for giving consent competently. (DeLourdes *et al.*, 2003:p.629)

Sammons *et al.* (2015) describe a need for children to be involved in the decision about research participation and argue that the method of documentation of such a process is less important than ensuring an outcome where the child feels they have been treated as an individual who matters. This suggests that the purpose of assent is less about the quality of the decision being made than it is about the patient's psychological welfare.

Wendler (2006) relates the requirement for a child's assent in research to their capacity to understand it, in a way not dissimilar to 'Gillick Competency'. He argues that all children over the age of 14 must assent to research, furthermore, that an inability to assent would make any non-beneficial research impermissible. Wendler indicates that the requirement to assent may only be waived in situations where the research offers the potential for direct medical benefit to the child, and that the sustained dissent of any child must be respected in all cases, in the interests of protecting them from harm (Wendler, 2006). This argument, which is later developed for animal donors (section 4.2.3), asserts that procedures conducted on individuals who have indicated that they do not wish for it to happen, must be considered potentially more harmful. When considering assent in a therapeutic, rather than non-therapeutic context, respecting the decision making of non-competent patients may conflict with a duty to act in their best interests. This provides perhaps a mirror image of the tensions identified when a consenting donor wishes to harm themselves through donation.

De Lourdes *et al.* (2003) frame assent in the medical context in terms of the individual's rights, in a similar way to that normally applied to informed consent:

> All children, even those not judged as competent, have a right to receive information given in a way that they can understand and give their assent or dissent (DeLourdes *et al.*, 2003:p.629).

The authors suggest that assent is required for any treatment which is not necessary to save life or prevent serious harm, but defer to the duty of the doctor to act in the best interests of the child in these circumstances. This analysis indicates that there is a limit to the significance of a patient's assent or dissent in that it can only be used to make decisions which are not contrary to the patient's interests. This would mean that assent/dissent requirements may be overruled by a medical professional, unlike the consent of a normal adult. There appears, therefore, to be consensus on the view that the obligation of doctors and researchers to act in the best interests of their patient might weaken the decision making power of a non-consenting individual. Whilst assent/dissent appears to be valuable, lack of assent is not sufficient grounds to prevent interventions deemed to be in the patient's interest. However, active dissent appears to provide a greater obstacle to enforced procedures on the grounds that proceeding may inflict even greater harm.

Assent is a requirement of many ethical frameworks for living donation (Ross and Thistlethwaite, 2016) and it is addressed within the WHO guidelines in the context of child donors, although assent does not appear to be explicitly required:

> Specific measures should be in place to protect the minor and, wherever possible, the minor's assent should be obtained before donation. What is applicable to minors also applies to any legally incompetent persons (WHO, 2010:p.4).

In line with the previous discussion of assent more generally, for living donation where legal consent cannot be given, the donor should agree to donate wherever possible, but a lack of assent does not completely rule out donation. Further clarification is provided in the commentary:

> In any event, a minor's objection to making a donation should prevail over the permission provided by any other party. (WHO 2010:p.5)

Again dissent (here termed objection) is sufficient to prevent the procedure in all circumstances; it is made clear that donor dissent overrules the scope of authority of third party consent (or permission). Such permission will therefore only result in a donation being taken from a non-consenting human if they indicate their agreement, or at the very least, do not object.

It is interesting to note that the use of assent to guide ethical decision making in the donation context appears more in line with a donor best interest justification than an informed consent justification because its value appears to be limited to promoting the wellbeing of the donor. Non-consenting donors are only permitted to choose what is in their interests as the requirement for assent is overruled by the donor's medical interests, however, fear and distress must always be prevented through respecting dissent. It could therefore be argued that requiring assent and respecting dissent is merely a method of promoting the best interests of non-consenting donors, rather than respecting their decision making.

In an effort to identify conflicts of interest and protect both consenting and non-consenting donors, the use of living donor advocates as part of transplant teams is now common practice (Ross and Thistlethwaite, 2016). In some cases the consent of a parent or guardian will have no value if it is considered to be at odds with the best interests of a non-consenting donor.

Finally, the implications of terminology when non-consenting parties are used for living organ procurement has been explored by Van Assche *et al.* (2014) who suggest that such individuals cannot be termed donors due to their lack of involvement in the consent process but rather should be considered the '*organ source'* (Van-Assche *et al.*, 2014:p.102). It does not appear to be usual to make such a distinction, but this raises an important point for later consideration: How significant are the concepts of autonomy and consent to determining whether an individual is considered a 'donor'? Indeed, recent

exploration of this question introduced animal donors through considering whether the donor is the tissue source or the consenting party, when they are not the same individual (Machin and Cherkassky, 2016). The contested use of the term 'donor' and the contribution of this work to the debate is a major discussion point in the concluding chapter.

In this section the role of assent and dissent in non-consensual human living donation has been explored and the current ethical approach highlighted. Whilst assent is not considered a requirement for procedures which are in the donor's interests, dissent will overrule any third party consent in the interests of protecting the donor from additional harm.

3.2.4 Summary of donor informed consent

The first half of this chapter has been focussed on the critical role of informed consent in justifying human living donation. The purpose of consent was identified as enabling individuals to exercise their rights of determination over their own bodies. The principle of autonomy was defined and the criteria for autonomous decision making of voluntariness and understanding were each examined for their significance to the quality of donor consent. The risk of non-autonomous consent was raised before the scope of authority of informed consent to donation was examined. Justifiable uninformed consent was argued to exist in the case of donors who choose to make decisions based on limited information. Thresholds of harm which influence the authority of donor consent were shown to exist between the donation of renewable and non-renewable tissues and also in any donation which would result in significant harm to the donor. The scope of authority of third party consent for donation was shown to be limited by considerations of the best interests of non-consensual donors which may be identified according to their assent or dissent.

In Chapter 4, the meaning and purpose of veterinary informed consent, its validity and scope of authority will be compared by systematically re-

evaluating the findings of this analysis for its applicability in the veterinary setting.

This section has also identified limitations to the authority of donor consent which relate to the best interests of living human donors. Price (2000) suggests that '*the concept of autonomy and the individual's right to self-determination is the central legitimating feature of living donor transplantation, together with beneficence (p.227)*. Therefore, the second half of this chapter moves on from consent to explore 'beneficent' aspects of donation; identifying understandings of 'harm' and 'benefit' in the donation context before examining the justificatory argument of 'donor best interest'.

3.3 Donor harm, donor benefit and best interest justifications

The previous sections have shown that human bodily rights underpin consent justifications for living donation and, ideally, informed consent permits the donor to make autonomous choices. However, within the analysis of informed consent for living donation, several areas for concern regarding the ability of consent to effectively protect living donors have emerged and these concerns are even more significant in the case of non-consenting donors. If informed consent is not the only consideration in the justification of living human donations, what other arguments are made? In this section the harms and benefits which are exist for living donors and how they may interact in donor best interest justifications is explored.

3.3.1 Donor Harm

Of fundamental importance to the ethical analysis of donation practices is the conceptualisation of tissue and organ donation as something which causes actual or potential harm (risk) to the donor. This section explores in depth why, when and how living donations might harm a human donor, identifying how the concept of harm has been variously defined in the context of living donation. Chapter 4 will extend the same questions to comparable animal donation practices.

Is donation harmful?

In a purely physical sense it is difficult to argue that removing healthy tissue is not in some way harmful. However, some authors have argued that donation practices are not harmful *overall* because they also benefit the donor:

> …given the difficulties of making an overall assessment of the well-being of donors, it will be hard to show in many cases that people would be harmed overall if they donated (Wilkinson, 2011:p.126).

The later sections of this chapter consider potential donor benefits and finally the argument that donations might, overall, be in the donor's best interests. This section therefore focuses only on the potential physical and non-physical harms which must be considered for living human donors.

Physical harm

Living donation will inevitably cause varying degrees of actual and potential harm (risk) to the donor. These harms may be certain to happen because they are associated with the physical process of removing healthy tissue or the long-term effects resulting from functional loss of this tissue. Additional potential physical harm may result from unexpected medical complications (Crocco and D'Elia, 2007; Mjøen *et al.*, 2014).

A broad range of clinical procedures fall under the definition of 'donation'. The physical process of donation will therefore cause different degrees of harm dependant on the clinical procedures which are necessary to access and remove the tissue. The long term effects of its removal will depend on whether the tissue can be regenerated and, if not, how well the body can cope without it. These questions create the potential for widely varying degrees of physical harm to be caused by different types of living donation. It has also been recently pointed out that the likelihood as well as severity of specific donation risks is of critical importance to ethical justifications (Bailey and Huxtable, 2016).

Blood donation, for example, is associated with low degrees of actual and potential harm in humans (Crocco and D'Elia, 2007). The donated tissue (blood) can be accessed and removed through a small needle puncture of the skin and a superficial blood vessel with no anaesthetic required. The donated blood can be quickly regenerated by the body such that the donor is expected to be in a physically unaltered state within a few days of donating blood. However, there are still recognised risks associated with complications during and after blood donation with a low frequency of mild reactions such as agitation, sweating, pallor, cold feeling, sense of weakness and nausea being reported alongside rarer severe disorders, including vomiting, loss of consciousness, and convulsive syncope (Crocco and D'Elia, 2007). Whilst blood donation is possibly the least harmful of human living donations, harm is still a visible consideration in policy frameworks specific to this type of donation (ISBT, 2000).

The donation of non-regenerative whole organs such as in kidney donation is recognised to be considerably more harmful. The procedure will involve a general anaesthetic, abdominal surgery and the donor will be permanently left with less functioning renal tissue. Whilst the quality of life for most living kidney donors is suggested to be at least equal to that of the general population (Gross *et al.*, 2013), it is now recognised that kidney donors are at increased long-term risk for end stage renal disease, cardiovascular and all-cause mortality (Mjøen *et al.*, 2014). Harm to kidney donors is therefore generally described in terms of risk because whilst the physical harms associated with the donation process are usually temporary, there are definite, albeit small risks of permanent harm, including death (Mjøen *et al.*, 2014).

In addition to the donation of varying tissues representing differing degrees of risk so too will the individual characteristics of the donor, meaning that human donors are always assessed to determine their individual risk of physical harm. In most policy guidelines certain groups are automatically excluded from the pool of potential donors because the risk of harm to them

is greater. This might include the exclusion of individuals with a low blood volume or those above a certain age where general health may be deteriorating. For example, in the UK the NBS state that they generally exclude donors who are aged over 66 years or who weigh less than 50KG (NBS, 2017b).

Given the very wide range of donation practices and living donors which exist, it can be appreciated that the likelihood and severity of actual and potential physical harm is infinitely variable. At this stage it is sufficient to introduce the view that whilst living donation can always be assumed to represent some degree of harm, that valid ethical justifications will need to take account of the specific degree and likelihood of physical harm.

Non-physical harm

The earlier section concerned with informed consent (section 3.2.3) introduced the argument that individuals who cannot consent to living donation might experience psychological harm if the procedure is forced upon them against their will. Therefore, even when identical physical procedures are performed, the specific situation of an individual donor might create psychological harms such as fear or distress.

When considering living donation specifically, some recent literature moves away from clinical assessments of donor harm to offer more diverse accounts of how such procedures might impact negatively on a donor. For example, organ donation has been suggested to have negative financial implications (Cuesta-Briand B, 2015; Valapour *et al.*, 2011) and kidney donors have also identified a lack of emotional support following donation (Thys *et al.*, 2015). This stream of literature introduces the importance of sociological understandings of donation practices and illustrates how analysis of a normative concept such as 'harm' can be informed by both scientific clinical data (physical harms) and empirical social science (psychosocial harms). Literature which describes other psychosocial aspects of donation will be explored more fully in the later empirical chapters (Chapters 5 and 6).

A broader concept of non-physical or psychosocial harm has been applied specifically to living donation, in recognition of the potential for more than just the individual donor to be affected psychologically by donation procedures, and this is termed familial 'harm' (Feinberg, 1984; Raz, 1986). Wilkinson (2011) uses this argument to suggest that a parent, for example, may be harmed if their child dies through lack of an organ to transplant. This broader concept of familial 'harm' (or, viewed from the reverse perspective, familial benefit) is very important in the living donation context and familial benefit is addressed in detail later in this section.

Wider harms

One final aspect of 'harm' in the context of donation is that of the wider implications certain living donation practices might have. Consider the unusual but controversial creation of 'saviour siblings'; where artificial reproductive techniques are used to create and select embryos that will develop into children who are tissue compatible with an existing sick child. Aside from the questions already discussed above concerning causing physical or psychological harm to the 'saviour sibling' through donation procedures, much of the most recent ethical debate has centred on whether the act of creating such an individual for such a purpose is harmful in itself. Such argument focuses on the broader question of 'identity' and how the value of an individual's own existence may or may not be affected by creating them in such a manner and for such a purpose (Wilkinson, 2015; Taylor-Sands, 2015; Jackson, 2015; Gavaghan, 2015). Such arguments raise the perspective that some contemporary donation practices might be considered harmful not just with respect to the donation procedures which may be undertaken but because of the wider impacts that being identified as a potential 'donor' might have on an individual's lifestyle, familial relationships or entire existence. The thesis later refers back to this stream of literature when considering the wider activities which may be aimed at securing donations from animals such as farming, cloning or breeding animals as donors.

In summary, a range of actual or potential physical, non-physical and wider harms may be encountered by living donors. These harms are infinitely variable according to the type of donation and individual donor characteristics. Chapter 4 considers whether comparable donation practices in animals are likely to cause greater or lesser degrees of physical and non-physical harm to the donor.

The next section moves on from donor harm to consider the potential benefits of donation for both the tissue recipient and the donor themselves.

3.3.2 Benefit

This section considers the benefits of living donation. In order to retain a focus on the ethical analysis of donation, rather than the allocation and use of donated tissues, it will only consider the benefits to recipients insofar as they are relevant to the tissue donor.

Benefit to recipient

A central aspect of the ethical analysis of living donations is the understanding that such procedures are uniquely aimed at benefiting an individual other than the donor. The potential consequences of a pure utilitarian approach to balancing the harms and benefits of donation at a societal or population level have been identified as risking the promotion of greater benefits for tissue recipients at the expense of greater harms to donors (Harris, 1975). Rather, the focus of ethical arguments supporting living donations has been shown to encompass the protection of a patient's bodily rights and autonomy (Mill, 1990; Eyal, 2010; Manson and O'Neill, 2007; Bok, 1999; Archard, 2008; Beauchamp and Childress, 2013; Elliot, 1995), so far discussed in terms of donor informed consent (Price; 2000; Wilkinson, 2011; Morris, 1998; Lipworth *et al.* 2011; Cattapan, 2016; Guttman and Gerok, 1997; Fellner and Marshall, 1968; Valapour *et al*., 2011; Bailey and Huxtable, 2016; Morris, 1998). In which case, what role does the benefit planned for the recipient of the tissue play in the ethical argument? Would it be acceptable for individuals to

autonomously consent to harm themselves through the donation of healthy tissue even if there was no plan to use it?

This is an important question which has been clearly addressed both in policy guidelines and academic literature. The ISBT guidelines specify that a blood donor's consent can only encompass an agreement for the 'legitimate use' of the blood by the transfusion service (ISBT, 2000). Clearly then, there is no option for donors to choose to donate blood for which there is no legitimate use. The Council of Europe Convention also stipulates a need for a therapeutic use for any organ removed from a living human being (COE, 1996). It is the therapeutic use of the donated tissue which defines the donation as a genuine clinical procedure, distinct from other scientific practices such as research. Therefore, it can be stated that whilst an intended therapeutic outcome arising from the donation is required in order to *define* the procedure as clinical in nature, the *justification* of living human donation is not generally made by virtue of the benefits to the recipient alone, but through donor informed consent, benefits to the donor, or both.

The next section further explores the significance of recipient benefits, framing them ultimately as one of many potential donor benefits which may be used to counteract the clinical infliction of harm through donor best interest arguments.

Benefit to donor and 'do no harm'

Whilst donor informed consent cannot be used to justify the infliction of physical harm over a certain threshold, it could potentially permit one individual to agree to accept harm up to that threshold solely for the benefit of someone else, and some authors argue that where valid consent is provided this is ethically acceptable (Veatch, 2000). Aside from the problem of how much harm consent can justify, the ethical questions in donation are complicated by the involvement of a medical professional who must retrieve the donation. The Hippocratic Oath taken by the medical profession promises that medical professionals will *'First do no harm'* and the principle of non-

maleficence is considered key within contemporary medical ethics (Beauchamp and Childress, 2013). This duty has clear implications for living donation procedures. Professional ethics therefore add further complexity to the question of donor harm in that they appear to prohibit the removal of healthy organs.

However, non-maleficence is considered as but one of several non-absolute principles by philosopher Ross (Skelton, 2012) and contemporary understandings of non-maleficence in medical ethics also consider this principle as only one of four which have become a cornerstone of medical ethics: Beneficence, Non-Maleficence, Autonomy and Justice (Beauchamp and Childress, 2013). The four principles approach illustrates that clinical decision making is not dominated by the *prima facie* principle 'do no harm' alone but will often entail the balancing of competing ethical concerns. At times it may be justifiable to cause harm to a patient with the aim of helping them, or because it is their preferred course of treatment or in the interests of maximising benefits for the patient themselves or others. With respect to living organ donation, Lamb states:

> The principle of non-maleficence is not absolute. When intended benefits accrue to others, public interest objections to self-harm can be overruled (Lamb, 1996:p.45).

Even quite recently, clinical literature has promoted a view of donation and transplants which suggests that benefits to one individual *can* offset harms to another; for example Klintmalm (2008) argues for balancing *'the risk to the healthy living donor versus the recipient's risk of dying from disease'* (Klintmalm, 2008:p.275). One potential weakness of such an approach is that it appears asymmetrical in its application of different ethical principles to the donor and the recipient, such that the role of the principle of 'justice' is not clear. Such an argument could not prevent the needs of many sick patients outweighing considerable harms to donors and therefore undermining the aims of informed consent.

Whilst the ‘do no harm’ argument against living donation is not universally accepted (Wilkinson and Wilkinson, 2015) many authors do accept the problem and some have dealt with the issue by arguing that living donation, either with consent or without, may be considered non-harmful for the donor:

> The duty to do no harm only rules out taking organs from people who would be harmed overall. Donating an organ need not be against the donor's overall interests, so the duty need not rule out living donation. Indeed, given the difficulties of making an overall assessment of the well-being of donors, it will be hard to show in many cases that people would be harmed overall if they donated (Wilkinson, 2011:p.126).

The ‘do no harm’ argument might therefore be used to the physicians advantage though using a broadened definition of harms which include the aforementioned psychological harms, or vicarious harms, which might befall a potential donor who is not allowed to donate. The donation procedure might then result in no overall injury because the physical harm of donation is counteracted by the lack of psychological harm. Such an argument neatly sidesteps the physician’s obligation to ‘do no harm’ and might be considered an alternative application of a principled approach, whereby the principles of beneficence and non-maleficence are balanced with respect to the individual donor only. It is not yet clear, however, how such an argument might extend to justifying donation by strangers who could not suffer such harms if they did not donate (DenHartogh, 2008).

A logical extension of this argument appears to be that living donation is not merely ‘non-harmful’ but is actually beneficial to the donor. Spital (2004) claims that donor benefit is the key to justified living organ donation:

> Other than the occasional discovery during the donor evaluation of a treatable serious medical disorder, no physical benefit accrues to living organ donors. However, many donors experience psychological and emotional benefits, including an improved quality of life and

> lasting increases in self-esteem as a result of the knowledge that they have helped to save a life. Even when donors do not reap these rewards, they may gain another that may be even more important—that is, seeing a loved one resurrected and then having that cherished person available for sharing the joys of life (Spital, 2004:p.106).

In this way Spital is able to eliminate the possibility that living donation promotes the wellbeing of the recipient over that of the donor by arguing that benefits to recipients are valued *because* they also benefit the donor:

> The suggestion that donor benefit is the key to determining donor suitability does not mean that recipient benefit is irrelevant. The probability of a successful transplant is an important consideration, but not as a simple balancer of donor risk; rather because it provides essential information that affects the probability that the potential donor will benefit. For example, if there is no chance for a successful outcome, no one could benefit from forging ahead with transplantation (Spital, 2004:p.106).

It is not universally accepted, however, that benefits to a donor must always be identified; particularly when a donor is able to provide consent. Price (2000) argues that whilst valid benefits to the donor are vital to the justification of non-consensual donation they are, in reality, subsumed by the consent process in normal donations (p.258). What is interesting here is that Price does not deny that donor benefits do or should exist but merely argues that they do not need to be separately identified because the consent process should allow the donor to decide for themselves whether the procedure is in their own interests. Indeed, this is not far from Wilkinson's (2011) assertion that:

> While people are fallible judges of their own interests, one would hope that, with a proper informed consent procedure, not many people would make mistakes. I do not mean this to be a rhetorical

> question, but why would free informed competent people consider donation and then consent by mistake? (Wilkinson, 2011:p. 14)

An interesting application of this analysis is that *all* living donation is arguably justified through implicit or implied donor benefits, either in the form of clearly identifiable psychological benefits (Spital, 2004) or through donor informed consent (Price, 2000; Wilkinson 2011). As Price (2000) suggests, it is only when a donor cannot consent that a donor best interests argument must be clearly identified (and approved) by others; as was identified earlier in the section on assent, whilst normal donors may not be compelled to donate in their interests, non-consenting donors may be.

Spital (2004) requires the benefits to donors to be clearly understood and sanctioned by medical professionals in the interests of them advocating for their patient:

> No-one can predict the psychological and emotional impact of organ donation on the donor as well as the donor herself. Thus the volunteer's assessment of the relative size of risks and benefits should be given great weight as the physician makes her own determination. (Spital, 2004:p.108)

Spital's acceptance that it may be difficult for doctors to comprehend the benefits which donors see for themselves connects with the earlier section on justifiable invalid consent which introduced the often 'irrational' but autonomous decisions of the donor. Price (2000) and Wilkinson's (2011) support for informed consent as adequate for ensuring the donor is making decisions which are beneficial to them appears simpler, but makes assumptions regarding the effectiveness of consent procedures. Accepting that donor consent is adequate in this regard may also explain why the actual benefits which exist for donors appear to be poorly understood.

In summary, this section has explored the implications for living donation of a medical professional's duty not to harm their patients. Attempts to balance

the harms of donation against benefits for recipients using a principled approach were suggested to risk injustice; however, more recent arguments which reframe living donation as non-harmful or even beneficial to the donor appear more convincing.

The following section extends the narrow view of donor benefits as saving the lives of loved ones, introducing the perspective that benefits to donors and benefits to recipients might be understood as much less dependent on one another. That the benefits which exist for living donors might be more complex than the saving of a loved one may help to explain unrelated living donation but also creates confusion regarding how psychological benefits for non-competent donors might be understood and measured.

Farewell to altruism?

The later empirical chapters focus in some detail on donor motivation but in this section a conceptual argument is raised that refocusing living human donation practices on donor benefits could be seen as eroding the traditional notion of altruism which, for many, embodies the spirit of donation. Before exploring the complexities of psychological donor benefits in the next section, the relevance of clinical or physical benefits which might exist for blood and organ donors are discussed here, alongside recent literature which challenges the significance of altruism to living donation ethics.

In sociological writing on the donation of blood, it was traditionally accepted that donations were altruistic; that they were conducted for the benefit of the recipient only and that no benefit was sought by the donor (Titmuss, 1970). However, recent sociological studies of blood donors have suggested that mutuality, rather than altruism, best describes blood donation, because blood donors are also motivated by benefits for themselves, including the maintenance of blood stocks (Busby, 2004). 'Mutuality' appears to encompass a desire to help others in the expectation that the donor would also be helped if it were necessary, and the banking of blood generates a clear opportunity

for blood donors to create clinical benefits for others and also, perhaps, for themselves.

Donors of tissue and solid organs are unlikely to anticipate a clinical benefit for themselves although it is notable that some countries, such as Israel, place those who agree to cadaveric organ donation higher on the organ donation waiting list (Stoler *et al*., 2017). This unusual policy decision seems to extend the potential clinical benefit for living donors from sharing 'mutual' benefits to creating a priority reward only available for those who donate. It therefore appears to take the motivation for donation decisions even further from the altruistic ideal. Even in relation to organ donation in the UK, where no such rewards are made, the unclear definition of an altruistic donation in the face of acknowledged benefits for donors (Shaw, 2015), has led some to question the ongoing policy focus on altruism in organ donation (Moorlock *et al.*, 2014).

In traditional medical ethics literature, altruism is contrasted with payment or other *physical* reward for donation (Keown, 1997; Wilkinson 2003). However, if sizeable, non-financial physical benefits can be shown to exist for donors of blood or tissue, what does this mean for traditional notions of altruism? That donor benefits are already being used to challenge a focus on altruism in the blood and organ donation context is very significant: it could be argued that a focus on benefits to donors might be perceived as upsetting, rather than strengthening the traditional ethical justifications for living donations to the extent that they are reliant upon altruism. Furthermore, if non-financial benefits to donors are to be identified and even required, this must result in the need for a re-evaluation of whether and to what extent financial and other physical benefits are ethically different.

In summary, the significance and relevance of altruism to the ethical justification of living human donation is becoming increasingly unclear in light of the progressive focus on non-financial benefits for living donors of blood and organs. This may necessitate a re-examination of the boundaries

between ethically valid and ethically problematic clinical and physical donor rewards. In the next section the additional potential for psychological benefits from living donation is examined.

Psychological donor benefits

The benefits to living donors have been described as 'psychological' in the case of living related organ donation (Spital, 2004). It is notable that such psychological benefits are dependent on a successful transplant outcome and, should the transplant fail, it could be equally suggested that the donor might be psychologically harmed, perhaps experiencing guilt if they considered the failed transplant to be their fault. Nevertheless, this appears to be the predominant understanding of living organ donor 'benefit'.

The nature of the relationship between the donor and the recipient has therefore become crucial in identifying a psychological benefit which might exist for donors. The WHO guidelines state that '*In general, living donors should be genetically, legally or emotionally related to their recipients'* (WHO, 2010: Guiding Principle 3), implying that such relationships indicate a mutual dependency where a donor can be assumed to benefit in some way from saving their relative. There is an obvious problem with the interpretation of genetic relationships between the donor and the recipient in that it implies any genetically related donor will benefit from the donation outcome. In fact, authors have argued that genetic relatives who have a negative relationship should not be typed for donation (Bitan *et al.*, 2015). This highlights that such guidelines may be open to abuse, particularly when the donor is not able to consent, and that an emotional bond may be more significant than a genetic one, albeit more difficult to identify.

A meaningful relationship between the donor and recipient is considered so vital to donor benefit that WHO recommends donors who are not related in such a way should be subjected to a psychological evaluation (WHO, 2010: Guiding Principle 3). Whilst unrelated living donations are uncommon, they appear to be increasing (Wilkinson, 2011), what type of benefits might then

be argued to exist for donors who have no relationship to the recipient? Returning to the sociological studies of blood donation, the satisfaction of self-identifying or being acknowledged as a blood donor has recently been recognised as important to donors (Farrugia *et al*., 2010; Bednall *et al.*, 2013), and the same is reportedly being suggested by unrelated donors of solid tissue and organs in preliminary press reports (i-news, 2014).

The benefit of 'feeling good' about donating does not necessarily depend upon familial links with the recipient, indicating that the psychological benefits of donation could 'stand- alone' and exist without any relationship. What seems particularly important about such benefits is that they potentially separate the benefits to the donor from the outcomes of the transfusion or transplant; it is (more likely) possible to 'feel good' about donating to an individual you do not know regardless of the eventual clinical outcome for them. Experiencing psychological benefits from undergoing non-therapeutic surgery raises some interesting questions if such benefits are to be considered sufficient to justify the procedure in their own right. For instance, to what extent are physicians permitted or obliged to remove healthy tissue to satisfy a psychological need or benefit? Might the removal of healthy organs become a procedure which is primarily designed to make the donor 'feel better'?

In summary, psychological donor benefits have recently been shown to exist for living donors who have no meaningful relationship with the recipient. A crucial finding from the later empirical data analysis in Chapter 6 is that individuals consenting to donation may experience such a psychological benefit not only in the absence of a good clinical outcome but also when they are not the individual who is actually donating (Ashall and Hobson-West, 2017).

The next section considers the benefits from donation extending to those who are not the donor in the context of familial donation.

Familial benefits

In the same way that the familial nature of some donations has generated critique over individualistic accounts of autonomy and thus consent, similar arguments have been made with respect to the benefits of donation. Rather than considering benefits to the donor in isolation, some authors have called for recognition of the benefits which exist for the family unit as a whole (Taylor-Sands, 2015).

Of course, some benefits to donors may come as a result of benefits to the family; the interdependency of family members, even beyond those who are involved as donors and recipients, creates opportunities for benefits to be extended to many individuals. Where the familial benefits also benefit the donor there seems little cause for ethical concern (Wilkinson, 2011), but the pertinent question is whether valid benefits to a family can be argued to exist over and above the benefits to the donor themselves – an idea suggested to be a *'dangerous reification'* (p.236) by Buchanan and Brock, because of the potential for conflicted interests between the donor and their family (Buchanan and Brock, 1990).

Promoting a less individualistic approach to living donation risks undermining many of the underpinning ethical concepts which have already been discussed but it has been pointed out that traditional ethical approaches may not deal well with issues of a family nature. For example Crouch and Elliot (1999) maintain that:

> When it comes to moral decisions about the family, the tools of moral philosophy and the law have not always served us well, particularly when the question involves exposing one family member to risks for the sake of another … the picture is not of children and their parents located in a context of intimacy but of sovereign, independent human agents free of the moral and emotional connections that typically bind family members to each other (Crouch and Elliot, 1999:p.276)

Familial benefits from living donation will be explored in more detail in the empirical chapters which use the donation context to develop sociological understandings of interspecies 'families'. This section has raised the point that understanding the benefits of living donation in the wider family context appears vital for a complete understanding of such decisions and yet recognising familial benefits risks jeopardising the protection that individualistic approaches have traditionally afforded the donor.

The chapter now concludes with a consideration of the challenges posed by applying best interest arguments to non-consenting donors.

3.3.3 Best interests justifications for non-consenting donors

The broad concept of 'patient best interests' is now central to the justification of many therapeutic and research practices and has particular importance when making decisions for those who are unable to consent (Martin *et al.*, 2012; Birchley, 2016). This justification appears to be widely valued in preventing the exploitation of vulnerable individuals through a utilitarian justification of benefits to society. Its use promotes an individualistic approach to the treatment of the patient and clearly defines to whom the medical doctor is primarily responsible.

As was discussed earlier in this chapter, consenting donors are assumed by most authors to be able to protect their own interests and the degree to which medical professionals are responsible for policing the requirement for donor benefit remains unclear. Therefore, discussions of donor best interests are not prominent in ethical analyses of living donations which are taken with the donor's consent. In contrast, for non-consenting donations the procedure must be demonstrably in the patient's best interests in order to satisfy the medical professional's obligations, and it is this argument which is used to justify the uncommon practice of taking living donations from incompetent humans (Crouch and Elliot, 1999; Fleck, 2004; Martin *et al*., 2012; Van Assche *et al*. 2014). Quite recently, the 'best interests' argument has also been applied to the controversial area of non-heart beating organ donation where

it is argued that the contested state of the organ donor as 'living' should not rule out non-consenting donation if it is in the donor's best interests (Coggon *et al.*, 2008).

Since the balance of physical and non-physical harms and benefits associated with a proposed clinical intervention must be considered for each non-autonomous patient, questions are being raised outside the donation context about the relevance of the interests of others and the limitations of individualistic approaches to patient 'best interests' (Martin *et al.*, 2012). In line with earlier discussions of familial benefit in the donation context there has been disagreement on whether the 'best interests' judgement is made solely on the interests of the individual (Buchanan and Brock, 1990) or should be extended to include 'intimate attachments' (Jansen, 2004). Bitan *et al.* (2015) discuss the growing reliance on independent donor advocates who must ensure that the interests of the non-consenting donor are not eclipsed by the needs of the recipient or the family unit. The authors again maintain that a close emotional, rather than purely genetic bond is necessary between donor and recipient in order to argue for any real benefit to the donor (Bitan *et al.*, 2015). Although, as we have seen above, even in the context of close emotional bonds, it may be difficult to determine whether separate benefits exist for the recipient and other family members and how the balance of benefits is distributed between all parties. It is clear that the complexity of understanding and measuring psychological donor benefits and harms from the perspective of a third party is a critical handicap to best interest justifications.

Furthermore, the psychological nature of donor benefits has been contrasted with the physical harms of donation to label the best interests justifications as 'speculative':

> The benefits that are supposed to be the substance of the best interests of the donor child appear speculative and contrived for the most part (Fleck, 2004:p.162).

When identifying potential objections to the use of non-consenting donors the Law Review Commission of Canada suggested that such practices would necessitate a balancing of social worth, and furthermore that donor benefit is illusory (LRCC, 1992). With regards to the first point it is this 'balancing of social worth' which the identification of donor benefit aims to prevent; it is only when the recipient benefits but the donor does not that it could be implied one's wellbeing has greater importance than the other. However, the suggestion that there may be an 'illusion' of donor benefit is not uncommon. Crouch and Elliot (1999) raise the argument that a court might broaden the best interest test to the extent necessary to authorise a procedure which they had already decided should take place. That the benefits which exist for donors are invariably psychological, whereas the harms are physical, results in a greater likelihood of inaccuracy when defining and measuring the benefits. That this potential for inaccuracy might be exploited is the main ethical concern, particularly for non-consenting donors. Again, we return to the problem of poorly understood and defined benefits for donors which may be (acceptably) masked by the consent process for normal donors but which pose a considerable problem for non-consenting donations.

For some, these problems are not sufficient to rule out such a justification, which though challenging may be theoretically possible. The additional difficulties associated with the use of the best interests test for non-competent donors means that, rather than disagreement centring on whether incompetent donors might justifiably donate in their best interests; it is generally centred on the difficulty of proving that this is the case:

> Although I argue that it can be ethically permissible to take organs from children, whether organs should be taken depends on the possibility of distinguishing well enough in practice between permissible and impermissible cases (Wilkinson, 2011:p.139).

The practical limitations of applying this justification and the previous arguments concerning the potential for abuse might mean that it is often

considered safest to prohibit the use of donors who cannot consent completely. However, given that compelling arguments have been made for donation in the best interests of some such individuals, a blanket prohibition could also be argued to be unjust:

> A total ban on organ harvests from mentally incompetents might be contrary to their own interests since it may be the case, in very specific circumstances, that the benefits they would receive from providing an organ could reasonably be expected to significantly outweigh the risks (Van-Assche *et al.*, 2014:p.103).

It seems difficult to argue that a non-consenting donor should not be permitted to donate even if it is in their interests; for these individuals and such populations would then, by virtue of their lack of capacity, be denied the benefits which others are free to enjoy. The problem lies in being able to determine satisfactorily when this is the case and this is complex because of the nature of the benefits and the conflicted position of the individuals involved. It seems the choice is whether to accept the 'imprecision' of psychosocial judgements or deny non-competent donors such benefits because they can never be accurately measured:

> The elements of well-being are either incommensurable or only roughly comparable and the harms and benefits being judged will be imprecise, and intrinsically imprecise at that. The imprecision of well-being is not something to be ignored in the search for precision. Judging a child's interests entirely on supposedly precise estimates of physical risk, while ignoring the less easy to measure non-physical interests, would be precisely wrong rather than vaguely right (Wilkinson, 2011:p.143)

It would certainly seem fair to suggest that further empirical work on the psychosocial aspects of donation, and specifically non-consenting donation could only help with this ongoing debate. The work presented in this thesis is later argued to contribute significantly.

In summary, this section has identified donor best interest arguments as the primary justification for non-consensual living human donations, alongside the previously identified requirements for a clinical benefit for the recipient (section 3.3b) and any appropriate third party consent (section 3.2c). However, there are significant problems associated with accurate assessments of a donor's best interest, particularly because potential psychological benefits must be weighed against actual physical harms. Furthermore, the potentially conflicted interests of other family members may result in illusory benefits being accepted or the familial benefits of donation being prioritised. In spite of these problems some authors (Van Assche *et al*., 2014; Wilkinson, 2011) maintain that to prevent non-competent donors from donating in their best interest is not justifiable.

3.4 Conclusions

This chapter has analysed the ethical underpinnings of current approaches to living human donation. It has used peer reviewed literature; policy guidelines and monographs in medical ethics and donation ethics to identify, explore and critique current ethical approaches. The main findings of the chapter are summarised below.

Informed consent was identified as the primary justificatory argument for living human donation, based on a human's rights to bodily integrity. The underpinning ethical principle of **autonomy** was explored and **validity criteria** for consent of voluntariness and understanding were identified and examined. Recent work in medical ethics and donation ethics was used to highlight the challenges associated with traditional individualistic approaches to autonomy in the complex societal and familial contexts of living donation, furthermore, the specific risks of invalid or **non-autonomous** consent resulting from inadequate understanding of donation processes or external stakeholder influences were identified. The **scope of authority** of informed consent to living donation was explored, highlighting both why living donation might result from a donor's **justifiable uninformed consent** and the

limitations of donor consent in justifying donation beyond certain **thresholds of harm**. Finally, the case of non-consenting living donors was examined with regards to the role of their **assent** and the scope of authority of **third party consent** to living donation.

Donor Harm: A range of actual or potential **physical**, **non-physical** and **wider harms** which may be encountered by living donors was identified. These harms were argued to be infinitely variable according to the type of donation and individual donor characteristics.

Benefits to the **recipients** of donated tissue were identified as necessary to define living donation procedures as clinical in nature but are not, in themselves, sufficient to justify living human donations. Arguments of **donor benefit** have emerged to satisfy the physician's duty of **non-maleficence**; however, identifying donor benefits challenges traditional understandings of **altruism.** Furthermore**,** whilst the **psychological benefits** of donation are becoming better recognised, the question of how these fit with wider **familial benefits** or non-related living donations is currently unclear.

Donor best interest was identified as the primary justificatory argument applied in the unusual case of **non-consenting living human donors**. However, the psychological nature of presumed donor benefits and the conflicted position of the individuals involved make satisfactory determination of donor best interest particularly complex.

Chapter 4 next considers to what extent the identified ethical justifications for human living donation might be adapted or applied to the case of animal donors. The justifications of informed consent and donor best interest are therefore re-examined, systematically considering the relevance of the underpinning theories, principles and challenges highlighted in the summary above for their relevance to the veterinary setting. The comparative normative analysis ultimately identifies both transferrable and non-transferrable justifications for living animal donation.

4. A COMPARATIVE ETHICAL ANALYSIS OF LIVING ANIMAL DONATION

4.1 Introduction

This chapter builds on the findings of Chapter 3 to answer Research Question 1:

RQ1 To what extent can the ethical justifications for living human donation be applied to living animal donation?

In the previous chapter the ethical justifications for human living donation were identified and examined in detail. In this chapter the extent to which these justifications may be applied or adapted for the veterinary setting will be explored.

In the human medical context Wilkinson argues that: *It is of course widely accepted that living donation is morally permissible, as the figures for living donation suggest* (Wilkinson, 2011:p.124). But what is known about the moral permissibility of living animal 'donation'?

The introductory chapter highlighted the relative lack of development of the academic field of veterinary ethics when compared to medical ethics. In contrast to the extensive body of literature concerned with the ethics of human living donation which was explored in Chapter 3, literature addressing living animal donation is scarce. The earliest ethical analysis of living animal donation was focused on a scientific interest in renal xenotransplantation between pigs and humans which began developing the 1980s (Bühler, 1999; Wilkstrom, 2017). Rollin (2006) wrote at the time that well cared for donor pigs should not be a moral concern for a society which routinely kills this species for food. However, the focus of this study is on the more recent use of companion animals as living donors for another animal of the same species. One relevant recent paper by Yeates (2014) addresses ethical considerations in feline renal transplantation and focuses on harm/benefit considerations and animal *'telos'* (referring to the degree to which an animal meets its

species identity (Rollin, 1981)) for both recipient and source animals. The role of the veterinary surgeon is explored and the veterinary surgeon's duty not to harm their patient is used to support the assertion that '*Kidney transplantation should not occur where any one cat would be harmed overall*' (Yeates, 2014:p.406). As such, the conclusions of the paper have some important overlap with this work although they are limited to one example of living animal donation and are not informed by a systematic comparative analysis. Deluca *et al.* (2006) have reviewed a 'volunteer' model of canine blood banking in the US. The authors informally explore the use of the word 'volunteer', discuss owner informed consent and the 'assent' of canine donors and describe observed parallels with paediatric human medicine. The paper also presents some interesting anecdotal observations on the motivations and behaviours of the owners of donor dogs (Deluca *et al.*, 2006). This thesis develops the limited current ethical analysis of living animal donation and represents a far more detailed and structured analysis which is informed by both comparative and empirical methods. Given the lack of previous work addressing this specific topic, wider literature on veterinary ethics, animal ethics and animal research ethics is used to support the comparative analysis in this chapter.

Methodologically the comparative ethical approach taken in this work is novel. Recent veterinary ethics literature frequently examines the ethical justification for specific veterinary clinical procedures, for example most influential monographs in veterinary ethics take a case based approach to exploring a variety of clinical scenarios (Rollin, 2006; Sandoe *et al.*, 2015). However, specific veterinary clinical procedures are ethically scrutinised in a variety of ways. Some analyses are focused heavily on animal welfare, for example in equine reproductive techniques (Campbell and Sandøe, 2015), others explore ethical plurality and overlapping consensus such as in the case of routine neutering of companion animals (Palmer *et al.*, 2012).

With respect to comparative ethical analysis, the moral role of veterinary surgeons and paediatricians has been compared by veterinary ethicists

(Fettman and Rollin, 2002) but the implications have rarely been applied to comparative studies of specific clinical encounters in human and animal contexts. Indeed, there is very limited published work which specifically compares the ethical justifications for similar human and animal clinical practices. One recent paper compares the ethical role of practitioners who treat humans or animals involved in sport (Campbell, 2013). This study considers the case of potentially harmful human or animal clinical interventions and the conflicting interests of third parties who may be motivated by profit when using animals or humans for sport. Campbell's approach focuses on identifying ethical issues surrounding the use of horses for sport and comparing the professional role of the veterinarian with that of a sports physician. The resulting discussion concerning conflicts of responsibility, patient autonomy and the veterinarian's moral role have resonance with the findings of this study. In addition to the clinical area being markedly different, however, Campbell's paper does not have any empirical element which in this study is vital in identifying societal differences as well as similarities between the treatment of animals and humans.

This chapter takes a unique approach to comparative ethical analysis by evaluating the relevance in the veterinary context of the justificatory frameworks for human living donation. The chapter follows the structure of Chapter 3; systematically re-evaluating each of the identified ethical discussion points in order to develop a thorough exploration of the extent to which they might be adapted or applied to living animal donations. The chapter initially explores informed consent in the veterinary setting, again identifying its meaning and purpose before considering the criteria necessary for valid animal owner consent and examining the scope of its authority with respect to living animal donations. When and how donation practices might be considered to be harmful to animal donors is investigated next; again including potential physical, non-physical and wider harms. Finally, the justificatory argument of donor best interests is revisited; considering to what

extent the benefits which exist for living human donors might be transferred to living animal donors.

Chapters 5 and 6 later explore empirical data generated in the context of veterinary blood donation; analysing the accounts of animal owners and veterinary professionals to support inform or challenge the ethical conclusions reached in this chapter. Finally, an empirical bioethics approach to living animal donations is used to develop a justificatory framework for living animal donation in Chapter 7.

This chapter commences with a comparative examination of informed consent as a justification for living animal donation.

4.2 Informed consent in the veterinary setting

In his seminal work *Philosophical Medical Ethics* Raanon Gillon asks this provocative question:

> Vets do not bother with their patients' consent: why should doctors? (Gillon, 1985:p.113)

Gillon raises a fundamental ethical difference between the human and animal medical contexts by highlighting that animal 'patients' never consent to their treatment. Given the critical importance of informed consent to the justification of living human donations, what does this mean for the justification of living animal donations? In the veterinary context the lack of donor animal consent has already been raised, for example, here in an ethics commentary within a UK veterinary journal:

> Blood 'donation' by dogs has a particular ethical nuance due to the lack of ability to consent by the donor. Despite the obvious benefits to very sick animals requiring blood products, I must admit this lack of consent leaves me with a slight uneasiness. (Mullan, 2010:p.38)

This section explores the rationale and implications of a lack of donor animal consent and addresses the additional complexity presented in the veterinary

situation whereby animal *owner* consent is legally required for all veterinary procedures, including living animal donations. Following the structure of the previous chapter to facilitate a comparative analysis, the different purpose of informed consent in the veterinary setting is examined first before the shared underpinning principle of autonomy is used to argue that the validity criteria for a human patient's informed consent and an animal owner's informed consent are identical. Finally, the scope of authority of animal owner consent in living animal donation is explored.

4.2.1 Why informed consent for living animal donation?

Manson and O'Neill raise the critical point that the principle of consent cannot be taken as a mobile ethical justification which can be applied in any circumstances:

> Consent is not a freestanding principle with independent moral force (Manson and O'Neill, 2007:p.72).

In Chapter 3, a human patient's informed consent was described as important because it has a particular moral meaning; its ethical purpose is to protect a patient's rights to make choices concerning their own body. As Manson and O'Neill suggest, the principle of consent does not have the same moral force in every circumstance, its power relates to the significance of its aims and how well they are achieved. In the veterinary setting informed consent must be provided by an animal's owner rather than the animal themselves, but what is the purpose of an animal owner's informed consent and what does this imply about its moral force?

Whilst veterinary consent practices have attracted some attention in the literature with a small number of articles addressing the legal requirements and implications of veterinary consent, there has been very little discussion of the ethical nature and purpose of veterinary consent (Fettman and Rollin, 2002) which is, therefore, unclear. Flemming and Scott (2004) suggest that:

> The purpose of [veterinary] informed consent is to provide the client enough information that he or she can make an informed decision for or against the recommended health care (Flemming and Scott, 2004:p.1439).

Whilst Flemming and Scott describe how veterinary informed consent aims to improve an owner's decision making, they do not explain the purpose of requiring an owner's informed decision. Who is being protected by an owner's informed consent to veterinary treatment and why?

From a legal perspective, human medical procedures conducted without consent could result in accusations of assault being brought. In the veterinary context however:

> Any unconsented harm caused by a veterinarian to an animal owned by another individual would likely violate a property right and therefore be a form of civil wrong. It is on this basis that the informed consent doctrine applies to animals and, thereby, to veterinarians. (Flemming and Scott, 2004:p. 1436)

Flemming and Scott (2004) illustrate how the legal basis of an animal owner's consent differs from the legal basis of a human patient's informed consent. Consent provided by animal owners protects their legal rights over property; it does not protect any legal rights connected to the animal patient themselves. Unlike the assault charges faced by doctors acting without consent, a veterinarian acting without proper consent would be accused of damaging (animal) property.

Historically, this legal focus on property rights makes sense if one accepts that consent in the veterinary setting was traditionally associated with making choices which preserved the economic value of a farmer's stock (Fettman and Rollin, 2002). An animal owner's informed consent still has the same legal function today with animals being considered (for most legal purposes) as special property (Flemming and Scott, 2004). In more recent years the

relationship between humans and animals in the veterinary setting has altered significantly, with more focus on animals as companions and a broader understanding of the animal's value, such as an emotional significance, rather than only an economic value (Hueston, 2016, Hobson-West and Timmons, 2015). Indeed, Fettman and Rollin specifically link this shift to changes in the 'paradigm' of informed consent, suggesting that:

> The growing populations of companion animals and the shift in veterinary-client relationships to one founded in the human-animal bond has effectively altered the paradigm of informed consent, even if the profession has not yet fully acclimated to this important change. In this instance, the economic foundation of informed consent has largely been replaced by an emotional and moral one, wherein risk and benefit are judged in terms of quality of life, empathy, anthropomorphism, and considerations for informed consent not unlike those for parent, child, and paediatrician (Fettman and Rollin, 2002:p.1386)

Fettman and Rollin's argument picks up on the changing nature of veterinary work which was discussed in the introductory chapter, and their assertion that an animal owner's decision making regarding veterinary treatment may now often be rooted in emotion and not economics is persuasive. However, what remains constant regardless of the type of owner-animal relationship is that owner informed consent is designed to allow animal owners to make autonomous choices which protect the value of their animal (whether economic, emotional, etc.) *to themselves*. The broader ethical role of owner informed consent, whilst poorly defined, cannot be considered to be the same as that of first order human medical consent, which aims to protect the rights of the patient. The thesis later returns to the relevance of Fettman and Rollin's (2002) comparison between vets and paediatricians (Section 4.3.3).

In summary, this section has shown that the legal purpose of an animal owner's informed consent is to protect their property rights by enabling them

to make autonomous decisions concerning the veterinary treatment of their animal. Animal owner consent cannot, therefore, have the same ethical purpose as first order consent in the human medical setting which protects the patient's rights to bodily integrity. The implications of this different purpose with regards to the moral force of an animal owner's consent will be explored in section 4.2.3. The next section argues that despite its different purpose, an animal owner's consent has identical validity criteria to a human patient's consent because both are underpinned by the principle of autonomy.

4.2.2 Autonomy and validity in owner informed consent

Passatino (2011) argues that an animal owner's informed consent does not protect *individual autonomy*, because of the lack of capacity of animal patients to make their own medical decisions.

> [Veterinary consent] is not based on the principle of individual autonomy, since [autonomy] expresses the subject's self-determination, which the animal species is not endowed with (Passatino *et al.*, 2011:p.129)

However, Passatino's assertion appears to confuse the separate questions of who is providing consent in the veterinary setting and whether their consent is based on the principle of autonomy. In spite of the different purpose of an animal owner's informed consent it does aim to protect the *owner's* autonomy, meaning that all the previous discussions in Chapter 3 concerning individual autonomy and the validity of informed consent can be transferred directly to the veterinary setting with regards to considering how well the consent process enables the *owner* to make autonomous decisions.

To illustrate the point, valid informed consent procedures in human medicine are argued to facilitate a decision which is made voluntarily, with full knowledge and understanding of the relevant information (DelCarmen and Joffe, 2005). Valid owner informed consent in veterinary practice requires the

same considerations; specifically the need for full information provision, understanding and free choice has been clearly identified (Bateman, 2007).

The shared underpinning principle of autonomy means the criteria which must be met for *valid consent* (representing an autonomous decision) to be given in the animal or human medical settings are identical. Consequently, the specific validity concerns associated with consent to living human donation (identified in Chapter 3) may be directly transferred to an owner's consent to donation in the veterinary setting, even though the moral authority of such consent may be different.

Informed owner consent – capacity and information

Ethical discussion concerning capacity and human medical consent is generally centred on the case of individuals who lack the capacity to consent to their own medical treatment. Whilst a comparable situation is generally assumed for all animal patients (although this will be discussed more fully in section 4.2.3), the capacity of an animal owner to provide informed consent for their animal's treatment appears to be a straightforward issue. Whilst all humans may require medical treatment at some point, regardless of their capacity, a scenario whereby an animal owner without capacity was required to give consent for their animal's treatment would seem to be very unlikely. Nevertheless, a general point can be easily made that an animal owner without capacity will not be able to provide valid consent for their animal to become a living donor.

The question of information provision in the veterinary context is, however, more interesting and the limited literature addressing the type of information which should be provided to animal owners in the veterinary context has been based on current human medical practice (Flemming & Scott, 2004). Due to the identical validity criteria, there is clear scope for veterinary professionals to learn from human medical professionals when it comes to improving the quality of informed consent procedures through effective information provision. Indeed, this is already occurring in the context of

communication, with studies of client-veterinarian interactions identifying poor communication skills in some veterinary professionals (Coe *et al.*, 2008, Shaw *et al.*, 2004b). Several authors have explicitly instructed veterinary professionals to improve communication in line with human medical professionals (Shaw *et al.*, 2004a, Bonvici and Keller, 2006).

However, whilst such comparisons might indeed be usefully applied, there are also risks associated with comparing animal owner and human patient consent practices in this way. It may be assumed, for example, that the information which is required by animal owners is the same as that required by human medical patients. Or, animal owners could be extrapolating what they know about human medical procedures to the veterinary situation; this raises important empirical questions which will be returned to in Chapter 5.

The UK regulatory body, the RCVS, states within its Code of Professional Conduct:

> Informed consent, which is an essential part of any contract, can only be given by a client who has had the opportunity to consider a range of reasonable treatment options, with associated fee estimates, and had the significance and main risks explained to them (RCVS, 2014b: Section 11.1).

Here, veterinary professionals recording an animal owner's consent are being reminded that there are minimum criteria which must be fulfilled for legally valid consent to be given, indicating that the risk of 'non-autonomous' informed consent, previously described as a *'tick box exercise'* (Dunn, 2016) (Chapter 3) could also occur in the veterinary setting. Furthermore, this general guidance on obtaining consent is applied to all veterinary procedures in the UK, including living animal donation.

Chapter 3 illustrated that the information which must be disclosed to living human donors is not identical to that which is normally disclosed to clinical patients; the nature of the donation procedure means that additional factors

such as the intended use of the tissue and the benefits which its use might achieve are also considered to be relevant to a donor's autonomous decision making. Whilst existing legislation and policy guidelines specify disclosure requirements for consent to human living donation, there is no evidence of an understanding in the veterinary context that additional information requirements might be necessary for animal donations. The state of knowledge regarding the intended use of donated animal material and the likely outcomes for recipients as well as donors is explored in both empirical chapters. Policy implications for improved information provision in living animal donation are then addressed in Chapter 7.

In summary, this section has highlighted that whilst owner capacity is unlikely to commonly result in invalid consent, the tendency to extrapolate requirements for information provision from human medicine and the lack of specific information provision for consent to animal living donation do present risks to the validity of owner consent. The next section considers the additional validity requirement of voluntariness, highlighting the potentially transferable risk of involuntary consent to donation and indicating the significance of this theme in the empirical data analysis.

Voluntary owner consent – intention and influence

Chapter 3 identified a specific challenge for voluntary donation decisions whereby the complex relationships between the stakeholders in living human donation might challenge the idealised individualistic nature of autonomy. In animal donation decisions the stakeholder groups are even more numerous and this particular question will later be explored in light of the empirical data analysis in Chapter 6, where the construction of animals as non-human family members generates novel accounts of relational donation decision making.

In human living donation ethics, inducement in the form of payment or reward is also of significant interest because this particular influence on voluntary decision making may result in exploitation of the most vulnerable (Rizvi, *et al.,* 2009; Adair and Wigmore, 2011). Whilst the concept of paying or

rewarding an individual to consent to a donation from a third party has not previously been discussed in the literature, it might be assumed that the potential for conflicted interests between the consenting party and the donor would make such a practice even more questionable. It may also be the case that the effectiveness of such external pressures on donation decision making could even be greater in the veterinary setting because concerns over donor harm may present less of a barrier. Again the empirical data analysis later deals with the novel question of reward for living animal donation and its implications for donor exploitation (Chapter 6).

In summary, the previously identified relational or reward influences on voluntary donation decision making are argued to both be potentially more problematic in the veterinary setting. Whilst there is no existing literature which addresses these concerns, both become points of discussion in the later empirical chapters. The final section addressing the validity of owner informed consent reconsiders the voluntary provision of uninformed consent to living donation; reframing such a situation as *unjustifiable* in the veterinary context.

(Un) justifiable uninformed owner consent?

In Chapter 3, it was shown that in spite of the accepted validity requirements for informed consent, some donors are reportedly satisfied with decisions made without a full understanding of much of the information relevant to their donation (Fellner and Marshall, 1968; Valapour *et al.*, 2011). It was argued that human donors appear to afford more weight to the outcome for the recipient than to the risks or consequences for themselves. Furthermore, whilst the donor's consent may be argued to be uninformed, the donation may still be justifiable because the donor made their decision based on the information which was important to them.

A comparable scenario would, however, be far more problematic for the veterinary field because the individual consenting to the donation is not the one who is undertaking the (poorly understood) risk. Whilst human donors

may voluntarily accept an unknown risk in pursuit of anticipated benefit, because the animal donor's voluntary decision is not the basis for justifying animal donations, such a scenario would merely indicate an unbalanced approach to assessing the factual basis of any alternative ethical justification.

Consequently, if animal owners were similarly satisfied with donation decisions made without full understanding of relevant information, it could be argued that even where their uninformed consent is defensible, the donation may be unjustifiable on a factual basis. Again, this aspect of owner consent to living animal donation is explored further in both empirical chapters.

The next section of this chapter moves on from the validity of owner consent to consider the scope of authority of owner consent in the veterinary setting and in living animal donation specifically.

4.2.3 Scope of authority and owner consent to living animal donations

The legal purpose of an animal owner's informed consent is to protect their property rights (Flemming and Scott, 2004; Fettman and Rollin, 2002). This means that its ethical purpose cannot be identical to informed consent given in the human medical setting, which protects the patient's rights to bodily integrity (Mill, 1990; Eyal, 2012; Manson and O'Neill, 2007; Wilkinson, 2011; Price, 2000). By returning to the different purpose of an animal owner's consent, this section considers the ethical implications with regards to the moral force of an animal owner's consent and thus the scope of its authority.

Given the different legal purpose of an animal owners informed consent, can such consent be considered morally equivalent to consent provided by a human patient? Wilkinson states that (for humans):

> Consent is second order, arising out of some entitlement such as a right over our own bodies. That is why you, a stranger, cannot consent to an operation on me; you do not have a right over my body (Wilkinson, 2011:p.23).

Whilst humans may possess *legal* rights over their animals which permit them to consent to animal treatment, this does not equate to the *moral* rights a human possesses over their own body. Furthermore, any legal rights an animal owner possesses may conflict with any moral rights possessed by the animals themselves. The next section considers first whether animals might also possess bodily rights.

Bodily rights for animals?

Chapter 3 discussed fundamental human rights to bodily integrity which are protected by informed consent. The existence of human bodily rights is not controversial and a lack of respect for comparative rights in animals has already been identified in the veterinary donation context:

> Finally, it seems, we are left with another ethical case in which, if it were to involve young human donors their rights would be protected, but for animals we accept a utilitarian analysis in which rights are not involved and harms are weighed against the benefits (Mullan, 2010:p.39).

This suggestion that a utilitarian analysis of living animal donation which does not respect any rights, is accepted, deserves further examination.

The inclusiveness of utilitarian theory has led to many utilitarians arguing for the positioning of animals within the moral community. The founder of utilitarianism Jeremy Bentham was fundamental in challenging animal cruelty in the late eighteenth century; dispelling the arguments that animals were morally inferior to humans due to our greater intelligence and language:

> The day may come when the rest of animal creation may acquire those rights which never could have been witholden from them but by the hand of tyranny……The question is not, Can they reason? Nor Can they talk? but, Can they suffer? (Bentham, 1789: Chapter 17)

A present day utilitarian, Singer (2011) promotes equality for animals as being consistent with utilitarian equal consideration of interests. Singer does not

argue for equal treatment of animals and humans but rather equal consideration, he suggests that '*If a being suffers, there can be no moral justification for refusing to take that suffering into consideration'* (Singer 2011:p50). Therefore a utilitarian view might be that whilst animals may not have an interest in all that human beings value, where we do have shared interests, for example, a need for food or shelter or to avoid pain, we should give equal consideration to humans and animals. It is important to reflect on the implication of using utilitarian reasoning to make moral judgements concerning causing harm to animals. Whilst reasoning such as Singer's would make an animal's capacity to suffer relevant, it does not make causing animals to suffer impermissible. Rather, this suffering must be weighed against the suffering and happiness of other animals and humans such that utilitarian reasoning is commonly used to *justify* the causing of harm to animals, for example in animal research:

> If some use of animals is necessary to achieve benefits which it would be morally wrong to forgo, the moral community, it may be argued, has a responsibility, in particular cases, to 'weigh' these benefits against the 'cost', in terms of animal suffering, imposed by the research (Smith and Boyd, 1991:p25)

Beauchamp and Childress (1994) highlight a common criticism of utilitarian theory regarding the potential for unfair distribution of harms and benefits *'The utilitarians assign no independent weight to justice and are indifferent to unjust distributions'* (Beauchamp and Childress, 1994:p.54). The negative consequences of this inherent problem with consequentialist reasoning might well be argued to be experienced more commonly by non-human than human animals. If animals are included in the utilitarian moral community by virtue of their capacity to suffer, they also become burdened by an obligation to promote the community's best interests, even when this causes them harm. Living animal donations, like living human donations, involve the harming of one individual for the benefit of another. However, the work of Harris (1975) was earlier used to illustrate the potential implications of a pure

consequentialist approach to living donation ethics in humans; the random selection and sacrifice of healthy individuals for the greater benefit of society. Much as this approach is not tolerated in human society, it must be appreciated that the same can be said for companion animal donation and existing UK regulatory frameworks do not support such an approach. Rather than describing a utilitarian analysis it could be argued that the 'weighing' of benefits and harms in living animal donation which is described above by Mullan (2010) represents a non-absolutist deontological approach, similar to that taken for human donors, where the rights of one individual are balanced against those of others.

Indeed, the utilitarian lack of respect for individuals has led many authors to use deontological theory to argue for animal 'rights'. Tom Regan (2003) was influential in proposing the view that animals have moral rights; he suggests that all normal, mature mammals are 'subjects-of-a-life' and have inherent value which gives them moral rights. Animals (and some humans) are considered *'moral patients'* (p.18) by Regan; capable of being morally wronged whilst incapable of acting morally (Regan, 2003). Gruen (1993) also suggests that moral rights belong to all subjects-of-a-life regardless of their colour, sex or, most importantly here, species. Whilst a minority advocate for equal rights for animals and humans this is considered an extreme perspective. Gruen elaborates thus:

> When people speak of an animal's rights, then, they are not speaking of a cow's right to vote, a guinea pig's right to a fair trial, or a cat's right to religious freedom…, but about the right an animal has to be treated with respect as an individual with inherent value (Gruen, 1993:p.386).

This theoretical view therefore takes account of the differences between humans and animals in that they are only argued to have rights according to their interests. Unlike the utilitarian approach, such interests cannot easily be offset by considering any beneficial consequences for the moral community

as a whole. Although, as has been previously highlighted, deontological theory might be applied in absolute (Kantian) terms or more commonly in non-absolute terms, where the multiple rights of one individual or of many individuals must be balanced.

Arguments for animals as individuals possessing specific moral rights are also made, for example, Wise (2003) argues for dignity rights in Great Apes by maintaining that they are as autonomous as some humans who are afforded such rights. However, the specific individual 'rights' possessed by animals rather than humans are far less widely accepted and whether animals possess moral rights to bodily integrity which are infringed by the removal of healthy tissue for donation has not previously been addressed.

Whilst a comprehensive argument for or against bodily rights for animals is outside the scope of this thesis, a relevant point which can be made is that some of the rationale for bodily rights in human donors may logically be extended to animals. For example, Wilkinson (2011) maintains that intuitions about bodily integrity are fundamental, more fundamental even than general ethical theories:

> While bodily integrity may logically follow from the deeper theories, normatively the justification goes the other way. The theories themselves are justified because of intuitions about bodily integrity (Wilkinson, 2011:p.17).

Such a position would indicate that the practice of applying ethical theory to animals results from intuitions about the moral significance of their bodily integrity. An argument for some form of bodily rights for animals could also be made based upon the work of Thomson (1986) who believes that rights to bodily integrity are justified in humans because they are individuals and not mere cells in an organism. This could be taken to imply that any living individual who is not a cell in an organism might claim such rights. Furthermore, Thompson argues that *'Rights over our own bodies underlie our other rights, that we could not have, say, property rights or rights not to be*

harmed, without also having rights over our bodies (Thompson, 1986:p51-52) Since domestic animals in many countries do have (limited) legal rights not to be harmed it could be argued that they must possess some degree of bodily rights.

For example, animals in the UK have been protected from 'cruelty' (which is described as the infliction of unnecessary suffering) since 1835 following successful lobbying by the newly formed RSPCA. The Cruelty to Animals Act 1835 focussed on cruel acts such as the beating of cattle and fighting with cocks and bears. Several later Acts further developed the idea of protection from cruel or unnecessary suffering; most recently through A(SP)A (1986). This legislation defines which animals are entitled to legal protection and the circumstances under which the intentional causation of pain and suffering is permitted. More recent legislation has moved beyond legal protection from cruelty and has imposed a 'duty of care' on animal owners to provide a good quality of life for their animals (Animal Welfare Act 2006); recognising their need for good physical health and mental wellbeing:

> A person commits an offence if he does not take such steps as are reasonable in all the circumstances to ensure that the needs of an animal for which he is responsible are met to the extent required by good practice (AWA, 2006:Provision 9.1)

If such arguments can be used to promote the moral significance of bodily integrity for animals, why are bodily rights for animals not clearly identified? Wilkinson is helpful in pointing out why a lack of clarity over ascribing rights exists even for humans:

> Because claim rights entail duties, they constrain the freedom of people besides the right holder. Each time we say someone has a right, we say that others must pay the cost of having their freedom restricted. The cost of rights helps explain why people sometimes have interests that are morally considerable but are not protected by a right (Wilkinson, 2011:p.13).

Wilkinson's argument highlights the considerable implications that clearly ascribing animals moral rights over their bodies would have, because of the restrictions it would place on the freedom of humans to use animals' bodies as they choose. However, Wilkinson's suggestion that individuals may have *'Interests that are morally considerable but are not protected by a right'* (2011, p.13) can be used to assert, at least, from all the discussion above that animals are widely assumed to have some degree of morally considerable bodily interests.

In summary, this section highlighted a claim that approaches to living animal donation practices are utilitarian. In spite of identifying accepted utilitarian approaches to some harmful practices conducted on living animals, work in human donation was used to show that pure utilitarian approaches to living donation are not accepted in either professional context in the UK. The concept of bodily rights for animals was explored and the claim made that whilst a morally considerable bodily interest can be argued for animals in a variety of ways, animals are not currently acknowledged to have equivalent bodily rights, perhaps because of the restrictions this would place on the human use of animals.

In the next section the relevance of animals' bodily interests to the scope of authority of their owners consent will be explored.

Thresholds of harm and consent to veterinary donation

Whilst the moral force of a human patient's consent is considerable because it protects a fundamental bodily right, the legal rights underpinning an animal owner's consent have reduced moral significance and they must compete with the identified moral interests of the animals themselves. The moral force of an animal owner's consent to veterinary treatment is not, therefore, equivalent to the moral force of a human patient's consent.

Chapter 3 highlighted that for human donors consent may only be used to justify the donation of regenerative tissue and that the living donation of non-regenerative tissue also necessitates the identification of donor benefits.

Furthermore, the donation of regenerative or non-regenerative tissue does not occur in humans who cannot consent, unless it can be convincingly argued to be in their best interests. *By extrapolation it could be argued that whilst animal donors do not possess the bodily rights of non-consenting human donors, they do possess some degree of moral interest in their own body, and the reduced moral force of an animal owner's informed consent should be reflected in a reduced threshold of the harm which such consent may justify.* Since consent alone may only justify the donation of regenerative tissue in human donors, this threshold may be considered too high for animal donors such that some degree of donor benefit might also be suggested to be required.

A similar permissible harm threshold is reached if an animal owner's consent is compared with third party consent provided in the human medical setting. Whilst an animal owner's third party consent may be argued to have greater authority because of their legal ownership and the lack of animal bodily rights, third party consent in the human medical setting cannot be used to justify any donation which is not in the best interests of the donor. The suggested harm threshold of regenerative tissue donation only with some degree of donor benefit does therefore represent a greater permissiveness for animal donors with their owner's consent.

The risk of using the regenerative nature of donated tissue as indicative of a transferable threshold of harm was highlighted in Chapter 3. It was argued that the donation of even regenerative tissue might be more harmful in non-consenting donors due to additional non-physical or wider harms. This question will be returned to in the later section on donor harm and may necessitate a further revision of the threshold of harm analysis for animal donors. Furthermore, the extrapolation of harm thresholds to the animal context might be additionally complicated by considerations of professional obligation, which are central to the analysis of non-consenting human donors and will be considered in the veterinary context later in this chapter (section 4.3.2).

In summary, when the reduced moral authority of animal owner consent is considered alongside the thresholds of harm which human donor consent can justify, animal owner consent might only be used to justify the donation of regenerative tissue and this may also necessitate the identification of donor benefits. However, later considerations of donor harm and professional obligation in the veterinary context might necessitate a further revision of this analysis.

The next section revisits the concepts of assent and third party consent, both of which have considerable significance for the veterinary setting.

Assent and consent provided by a third party

For human donors it was shown in Chapter 3 that the assent and dissent of non-consenting donors have great significance with regards to respecting limited autonomy and preventing psychological harm.

The earlier section on autonomy in this chapter accepted the prevailing opinion that companion animals do not have the capacity to provide consent for their own medical treatment or living donation and was instead focused on the relevance of autonomy to an animal owner's consent. This section examines the concept of 'capacity' or competence as applied to animals in order to argue that whilst an animal's informed consent might not be achievable, that assent or dissent in animal donors may be relevant for justifiable living donation even where third party consent is provided by the owner.

The question of competence in animals, as in humans, is not a straightforward issue. DeGrazia (2003) suggests that:

> The principle of respect for autonomy applies to competent adult human beings...many sentient beings, including human children and at least most non-human animals, are not autonomous in the relevant sense and so are not covered by this principle (DeGrazia, 2003:p.256).

However, medical ethics literature does not accept that reduced competence in humans makes the principle of autonomy irrelevant. Instead, the recognition of variable states of competence is used to support a more relative view of autonomy:

> The competence to decide is …relative to the particular decision to be made (Beauchamp and Childress, 2013:p.115)

That animals may also possess some degree of autonomy has been long argued and species which are able to demonstrate higher cognitive abilities such as dolphins and great apes are particularly discussed. Wise (2003) argues for dignity rights in Great Apes by maintaining that they are as autonomous as some humans who are afforded such rights:

> Beings may possess a much simpler ability that allows them to fulfil their intended purposes. Autonomy can encompass a range of capacities for consciousness from the most simple awareness of one's present experience to a much broader and deeper self-awareness, self-reflection and an awareness of the past, present and future (Wise, 2003:p.541).

Wise promotes autonomy for beings with simple self-awareness but this use of the term autonomy does not fit well with Beauchamp and Childress's three condition theory, nor with the general association of autonomy with reasoned thinking. Wise argues further that *'a full Kantian autonomy is too narrow a prerequisite for dignity rights'* (p.542), relating the definition of autonomy to the purpose for which it is being assessed. This argument returns us again to Beauchamp and Childress's assertion that capacity relates to purpose. Through introducing the phrases '*range of capacity*' and '*relevant autonomy*' both Wise and DeGrazia might agree that limited capacity and thus autonomy could be argued for some animal species.

That animals do not have the capacity to provide informed consent for living donation appears uncontroversial since a full understanding of the meaning,

aims and consequences of donation is challenging even for human donors. However, the capacity of many animal species does extend to an ability to anticipate, experience and seek to avoid fear and pain[13], which brings living animal donation practices within the range of their limited autonomous decision making. That animals are capable of displaying preferences based on physical and psychological likes or dislikes is accepted by the scientific community who use animal preference testing in scientific research (Myers, 2017; Roeckner, 2017).

In fact, animal preferences have been connected to the specific question of animal assent in the context of animals used in medical research. The argument appears to translate directly to a comparative analysis of living animal donation:

> The fact that investigators are required to solicit the assent and respect the dissent of human subjects who are unable to provide informed consent suggests that animals' inability to provide informed consent does not provide a justification for failing to take account of their preferences regarding whether they participate in research. (Kantin and Wendler, 2015:p.460)

This perspective is not unique; Johnson and Barnard (2014) also propose a requirement for assent in primate research and Ferdowsian and Gluck (2015) specifically compare human and animal research and assert that, for animals:

> The inability to provide informed consent should not be seen as a condition that justifies use of animals in ways they would resist if they could provide meaningful consent, assent, or dissent (p.403).

With respect to the role of assent in animal research, Kantin and Wendler (2015) promote two reasons for respecting animal subjects' preferences: welfare-based reasons and agency-based reasons. In line with the arguments outlined for non-competent humans in Chapter 3, it is suggested that '*forcing*

[13] See next section on donor harm for a more detailed discussion of physical harm.

an animal to take part in a study against her will has the potential to cause severe anxiety, stress and possibly lasting trauma' (p. 464). Whilst additional arguments are made by the authors for agency in higher primates such as chimpanzees, the capacity and complexity arguments made earlier in this section mean only welfare, rather than agency arguments for assent are likely to be relevant to the practice of living animal donation.

In spite of the well-developed literature considering assent in animal research, the concept has not been equally addressed in veterinary clinical literature, perhaps with good reason. Because veterinary procedures are (normally) therapeutic in nature it is highly likely that veterinary procedures will be conducted without the animals assent or even with their dissent *in their interests.* This brings discussion back to the role of assent/dissent in non-competent human patients and their greater authority in non-therapeutic than therapeutic procedures (Chapter 3), it also indicates that animal research literature, rather than veterinary clinical literature, may have more to offer in the way of operationalising justifications for non-therapeutic veterinary procedures (see Chapter 8). It is interesting to note that Wendler (2006) was also referred to in the previous chapter regarding the role of assent in paediatric research. It seems that other authors working in this specific area are mindful of the potential for crossover between the human and animal contexts regarding the role of assent and dissent in the justification of non-consensual and non-therapeutic procedures.

Kantin and Wendler (2015) define assent as a prospective indication of willingness and conclude that in most instances this will not be possible for animal subjects. However, dissent defined as an *expressed objection, either verbal or behavioural* (p. 461), it is argued, is more likely to be ascertainable even in those individuals which lack understanding. The argument that dissent is potentially more valuable than assent in the animal context is important because dissent is useful only in determining whether a procedure should be stopped, rather than whether it is justifiable to start (Bos *et al.*, 2016). From a policy perspective, if, as argued above, an animal's dissent has

meaning only in the context of harm, rather than agency, it may be possible to encompass respect for dissent within a consideration of the permissible harms of donation. However, as indicated by Bos *et al* (2016) this means that the harm burden experienced during the procedure should be continuously evaluated and considered in relation to the permitted justifiable levels.

Chapter 3 also highlighted that respect for a non-consenting living donor's dissent limits the scope of authority of both a doctor's decision making and any third party consent, meaning that only in extreme circumstances will a donor's expressed objection be overruled in their own best interests. For animal donations, which are also non-consensual, dissent is argued as relevant because it indicates increased harm which is contrary to an animal's bodily interests. Therefore it can be convincingly argued that an animal's dissent to donation may limit the authority of their owner's consent by increasing the harm threshold beyond that which such consent may justify.

Finally, in a rare paper which considers the ethics of canine blood donation DeLuca *et al* (2006) discuss their use of the term 'volunteer ' in canine donors to highlight the importance of donor assent:

> By choosing to consciously consider our dogs as volunteers, we are constantly reminded that their assent and cooperation is an essential component of their participation in the donation experience. (Deluca *et al.*, 2006:p. 137)

This comparative analysis has broadened the discussion to indicate that the concept of dissent is potentially more powerful than assent both in non-consensual human and animal donation. The association between voluntary decision making in the form of consent, assent or dissent and the terminology of donation is particularly interesting. In Chapter 3 the suggestion that 'organ source' is more appropriate than 'donor' for describing individuals who cannot consent to the removal of their organs (Van-Assche *et al.*, 2014) was highlighted. Recent work appears to link the perspectives raised by DeLuca et al (2006) in the animal context and Van-Assche et al (2014) in the human

context. Machin and Cherkassy (2016) comment on the use of companion animals as sources of blood and organs and suggest that questions surrounding whether a donor should be considered to be the consenting party or the tissue source now extend between both human and animal medicine (Machin and Cherkassky, 2016). This distinction relates to more than just terminology and is a major discussion point in the concluding chapter of this thesis.

In summary, this section has described limited capacity and thus autonomy in animals and uses literature concerned with assent and dissent in animal research to argue that there is a need to respect animal dissent in living animal donation practices for welfare rather than agency reasons. It is therefore deduced that animal dissent may reduce the scope of authority of owner consent through increasing the harm threshold of the donation, as is the case for non-consensual human donations. Finally, the significance of voluntary decision making to current literature which considers donation terminology was introduced.

4.2.4 Conclusion

The chapter so far has focused on informed consent for living animal donation. The different purpose of animal owner consent was identified as aiming to protect property rights over the animal; however, the validity criteria for human medical patient and animal owner informed consent were shown to be identical. The tendency to extrapolate requirements for information provision from human medicine and the lack of specific information provision for consent to living animal donation were argued to present risks to the quality of animal owner consent. Furthermore, previously identified relational or reward influences on voluntary donation decision making and the voluntary provision of uninformed consent for donation were argued to be potentially more problematic in the veterinary setting.

Arguments that existing analysis of living animal donation is utilitarian (Mullan, 2010) were challenged by highlighting that existing policy

approaches would not support the logical consequences of utilitarian arguments. Whilst animals were accepted to lack comparable bodily rights, the existence of morally considerable bodily interests were claimed for animals and the argument made that these interests may conflict with the owner's legal right of ownership, therefore reducing the moral authority of owner consent in comparison to patient consent provided in the human medical setting. The reduced moral authority of animal owner consent was considered alongside the thresholds of harm which human donor consent can justify, to argue that animal owner consent might only be used to justify the donation of regenerative tissue and that this may also necessitate the identification of donor benefits. Limited capacity and thus autonomy in animals was described and used to argue for the significance of respecting dissent in living animal donation for welfare reasons only. As a consequence, animal dissent may therefore further reduce the scope of authority of owner consent. Finally, the potential significance of voluntary decision making to donation terminology was introduced.

The second half of this chapter moves on from informed consent to consider the relevance of donor best interest justifications in the veterinary setting.

4.3 Donor harm, benefit and best interests justifications

The limitations of owner informed consent to the justification of living animal donation have already been raised with respect the scope of its authority. Similar concerns were identified for non-consenting human donors and Chapter 3 considered the scope and scale of harms and benefits which living donation procedures may create for human donors and how they may interact in justifications made according to the donor's best interests. Through comparing and contrasting the harms and benefits which exist for animal donors, this section considers how the justificatory framework of donor best interest might be adapted to the veterinary context.

4.3.1 Donor harm

As was earlier discussed, that human living donation practices may harm the donor is uncontested. It is this aspect of the procedure, together with its potential to benefit another patient, which uniquely characterises living 'donation' (Price, 2000). However, Chapter 3 also showed how living donation is sometimes described as non-harmful overall because the benefits which the donor can expect to gain may outweigh the harms of donation (Wilkinson, 2011). This section reconsiders the physical, non-physical and wider harms which living human donors encounter, exploring similarities and differences in the harms which may result from donation procedures experienced by living animal donors.

Physical harm

As was highlighted in the Introduction, the biological similarities between human and non-human mammals have been crucial in allowing veterinary medicine to extrapolate human medical techniques to animals and specifically to advance transfusion and transplant practices for animals; this being a critical point in support of a comparative ethical analysis. These biological similarities mean that the clinical procedures and treatments applied to humans and animals during donation can be very similar, for example, in canine blood donation identical equipment is used in the form of human blood collection bags. This biological connection between humans and animals creates considerable similarities in the physical harms which can be expected from donating blood. The physical risks to canine donors appear to be very slight (Couto and Iazbic, 2005) with bruising, bleeding and faintness occurring rarely (Day and Kohn, 2012). This low risk donation of blood is therefore similar to that previously described for human blood donors (Crocco and D'Elia, 2007).

However, for some animals the clinical practice applied to the donation of blood is different to that experienced by a human blood donor and the physical harms can therefore also be quite different. For example, feline blood donors are often sedated or anaesthetised for blood donation and

commonly need much more intensive aftercare such as intravenous fluids (Killos *et al.*, 2010). This alteration to the donation procedure is likely to be a significant contributing factor in the much greater risks of physical harm which are acknowledged for feline blood donors (Izabic *et al.*, 2007, Killos *et al.*, 2010).

The key comparative point to be made here is that whilst similar clinical practices should be acknowledged to have the potential to cause similar physical harms to animal donors, harm must not be assumed to be *limited* to that commonly experienced by human donors. Differences in species and in the actual clinical practices employed by veterinary surgeons mean that some donation practices which result in low risks for human donors (and some species of animal) may cause much greater physical harms to other animal species donating the same tissues. It is particularly important to revisit the assertion that the clear distinction between the physical harms caused by regenerative and non-regenerative tissue donation which is appreciated for human donors *cannot* be transferred to the veterinary setting, where current clinical practices result in much greater risks of physical harm for some donors of even regenerative tissue. For animal donations, valid justificatory frameworks must therefore consider the physical harms of donation in the context of the animal species as well as the donated tissue type.

In summary, the physical similarities between all mammals mean that comparable physical harms can be experienced by animal and human donors. However, the different donation practices applied to some animals can result in greater harms resulting from the donation of similar tissues. This is argued to erode the usefulness of harm thresholds based only on the regenerative nature of donated tissue for animal donors.

Non-physical harm

Veterinary clinical literature provides a good source of information on the harms and risks associated with specific animal donations (Couto and Iazbic, 2005, Izabic *et al.*, 2007, Killos *et al.*, 2010, Day and Kohn, 2012). Present

literature appears to focus on a narrow concept of harm which considers the physical or clinical risks of donation only. Human donors are acknowledged to also experience non-physical harm though living donation, including financial, emotional or vicarious 'harms' (Chapter 3). Whilst these specific non-physical harms may be difficult to transfer directly to animal donors, the potential for other non-physical harms should be considered carefully.

It has already been argued that because animals are donating without consent, their assent or dissent may be considered a representation of their acceptance or dislike of the donation procedures. Forcing an individual to undergo a procedure which they wish to avoid has been convincingly argued to impact on the psychological wellbeing of both paediatric donors (Wendler, 2006) and animals used in research (Kantin and Wendler, 2015; Johnson and Barnard, 2014; Ferdowsian and Gluck, 2015) through causing fear and distress. It does not, therefore, seem unreasonable to suggest that animals that are forced to undergo donation procedures might be similarly affected. The likelihood that living animal blood donors may experience psychological suffering has already been raised in the veterinary literature (Ashall, 2009).

With regards to the ethical significance of non-physical harm in animals, the inclusion of psychological wellbeing in assessments of animal welfare has been developed such that the most widely used framework for animal welfare assessment states that animals should have:

> **Freedom from fear and distress,** by ensuring conditions and treatment, which avoid mental suffering (FAWC, 1979:p.1).

Within this widely accepted animal welfare framework, psychological suffering is not indicated be any more or less significant than physical suffering.

Whilst psychological harm is only considered relevant for non-consenting human donors, since animal donations are always taken without donor consent the risk of causing non-physical harm of this type should be

considered for every living animal donor. This means that in clinically comparable areas such as blood donation, psychological suffering must be considered for animal donors even though it is not considered relevant in human donors (due to their ability to consent).

In summary, whilst current literature focuses narrowly on the physical harms of veterinary donation, the potential for psychological harm in the form of fear and distress should be considered equally significant for all animal donors because of the lack of donor consent.

Wider harms

Chapter 3 illustrated how some contemporary living human donation practices have generated ethical debate centred on wider harms relating to a donor's lifestyle, familial relationships or identity. For example, such arguments have recently been related to the purposeful 'creation' of donor children in order to save existing family members (Wilkinson, 2015; Taylor-Sands, 2015; Jackson, 2015; Gavaghan, 2015). This unusual practice creates a being *whose purpose* is to help another individual; potentially resulting in overarching obligations, familial tensions and limitations to independent choice which may impair the quality of their life outside the donation procedure (Chapter 3). The situation of one individual's existence being so clearly associated with the creation of benefits for another individual is very unusual in human living donations; it is only when the decision to use a child as a donor is made before that child exists that wider harms to a donor's identity have been argued (Wilkinson, 2015). However, the situation for animal donors presents a radical contrast with regards to this particular type of harm.

The question of identity for non-human animals is complicated by the various societal uses of different species (Joy, 2010) or even one species of animal (Rakhuyun, 2008; Gheaus, 2012). The role of emotional relationships between humans and animals is argued to be significant in public attitudes to different uses of animals:

> Human-animal emotional relationships have a complicated interplay with public attitudes toward animal use (Cox and Montrose, 2016:p.51)

Consequently, the societal context of animals (e.g. companion, wild, research, or farmed animals) has been argued to influence public perceptions of acceptable animal use and treatment (Cooke, 2011). Animals involved in living donation and the receipt of donated tissue, whilst necessarily of the same species, might be identified as companion animals, research animals, colony donors or strays. Consequently, donors and recipients may have differing degrees of emotional significance to humans.

The apparent hierarchy of these different animal 'types' is graphically highlighted by some animal donation practices. Animals bred for research may then be used as donors for companion animals in some countries, furthermore, companion species who are unowned strays might be offered as donors by 'rescue' shelters looking to find them homes:

> The donor can be selected from other cats in the same household or, as is more common, from an animal shelter. At university facilities donors are often selected from a research colony of cats who have been involved in benign experiments such as nutritional studies. Well established transplant facilities have made the necessary arrangements with local SPCA or Humane Society personnel (FCRFIC Website, 2016).

It also appears that the living donation of tissue from a research animal or a stray might result in their elevation to the status of a 'pet' if they are rehomed with the recipient (UDC, 2016). This interesting outcome will be discussed further in the following section on donor benefit, but for animals kept in blood donor colonies, for example, being identified as living donor implies a poorer quality of life and lower level of societal interest than the companion animals who receive the donated blood.

Of far greater significance than their lack of ability to consent, the living animal donor's lack of independent identity and control over their own life has enormous implications for donation practices in the veterinary context. The scale of human control over domesticated animals means that it is perfectly possible to create a supply of donor animals by testing and offering unwanted or commercially bred individuals of the same species as the pet. Existing animal management practices such as farming, breeding and cloning could also be used to create a steady stream of donor animals if the demand were great enough. Furthermore, whilst this thesis is concerned only with the comparable practice of living donation, the boundary of living donation in animals is not particularly clear. The killing of healthy animals is very common in our society and it could be argued that killing animals in order for them to become donors or permitting the killing of multiple unwanted animals in the knowledge that some may be used as donors might result in deceased animal donation practices influencing the fate of living healthy animals.

Animal owners may use their rights over their animals for a variety of reasons. It is outside the scope of this thesis to explore the moral justifications for societal treatment of animals. However, with respect to the harm caused to donors by living animal donation, practices which depend upon or create societal inequality between donating and receiving animals should be considered to involve wider harms to donors which must be accounted for in any ethical justification. This would arguably make the donation of tissue between animals that have the same societal value more easily justifiable.

In summary, wider harms of donation relating to identity and lifestyle have been identified only for very rare examples of living human donors (Wilkinson, 2015; Taylor-Sands, 2015; Jackson, 2015; Gavaghan, 2015). In contrast, the animal donor's lack of independent identity and the wide variety of accepted societal uses of animals results in a far greater potential for wider harms to result from living animal donation procedures. Some examples of existing animal donation practices are shown to depend upon societal inequalities between donor and recipient animals and it is argued that where

donation practices depend upon or create such inequalities they must be considered to cause wider harms to animal donors.

4.3.2 Benefit

This section moves on from donor harm to consider the benefits which might exist for animal donors. Following the structure of Chapter 3, it begins by considering the role of recipient benefits in living animal donation.

Benefit to recipient

Chapter 3 highlighted that an intended therapeutic outcome arising from a donation is required in order to define the procedure as clinical in nature (ISBT, 2000; COE, 1996). However, the justification for living human donation is not generally made by virtue of the benefit to the recipient alone, but through donor informed consent, benefits to the donor, or both. A comparable question is therefore whether recipient benefit is always required for veterinary donation, and whether this benefit might be considered necessary to define the procedure as a veterinary procedure or may be considered sufficient to justify living donations from animals.

Firstly, must a veterinary procedure always aim to provide a clinical benefit, as for human medical procedures? The RCVS provides clarification about when and why identical procedures might be considered a veterinary procedure or a scientific procedure:

> In all circumstances, the individual has to consider the primary purpose and whether he or she is acting in a professional capacity as a veterinary surgeon or as a research scientist. Although the procedures and techniques may be identical, analysis of the purpose for which they are applied should help the veterinary surgeon to determine if the intervention is of **direct benefit to the animal or its immediate group (i.e. others of the same species)** and therefore recognized veterinary practice, or, if the intervention is for an experimental or other scientific purpose and controlled by the A(SP)A (emphasis added (RCVS, 2016: section 25.6)).

Similarly to human medical practices, it therefore appears that a veterinary procedure must create a direct clinical benefit. However, what appears to separate the animal and human medical spheres is the suggestion that the benefit might apply to the animal itself *or* to its immediate group – this being presented here as others of the same species. The wording implies that a veterinary procedure might permissibly benefit other animals (of the same species) at a cost to the animal undergoing the procedure. The resulting question of whether animal donors, unlike human donors, may be harmed solely for the benefit of other animals is considered in the next section.

To summarise this section, whilst the requirement to intend a therapeutic outcome is comparable with the discussion of human living donation, the addition of the 'immediate group' clause in UK guidance creates a lack of clarity concerning the question of whether the intended clinical benefit merely *defines* or adequately *justifies* the donation procedure. The next section considers the professional implications of harming an animal donor.

Benefit to donor and 'do no harm'

Following further from the findings of the previous section, living donation as a human or animal clinical practice raises similar questions of professional ethics. In the human situation, Chapter 3 discussed the considerable debate centred on the Hippocratic Oath taken by the human medical profession to *'First do no harm'*, the principle of non-maleficence (Beauchamp and Childress, 2013), and the implications this duty has on the removal of healthy tissues and organs. Within the limited work which exists in veterinary ethics a duty of non-maleficence is far less prominent, although some authors have explicitly argued that a veterinary surgeon also has a duty not to harm their patients (Yeates, 2009).

With regards to policy guidance on this question, the UK veterinary profession has long maintained that animal welfare is its primary concern. The oath which must be taken by new veterinary surgeons in the UK has some similarity with the Hippocratic Oath and states that:

> .. ABOVE ALL, my constant endeavour will be to ensure the health and welfare of animals committed to my care (RCVS, 2014b),

But the code of conduct further recognises that veterinary surgeons' professional responsibilities to animals and their owners may, at times, conflict with each other and create ethical dilemmas. The veterinary surgeon is therefore advised to balance their professional responsibilities, giving first regard to animal welfare. The likelihood and accuracy of the good intentions of such a code is not universally accepted. Hewson (2006) commented that '*It is impossible to know whether taking an oath makes a difference to an individual veterinarian's attention to animal welfare'* (Hewson, 2006:p.809). More radically, it has even been suggested that this declaration '*Is at best delusional since its principle claim – to champion the welfare of animals – cannot be substantiated* '(Coffey, 2008:p.266). Coffey (2008) argues that by condoning and supporting the domestication of animals the profession becomes a tool of animal oppression, complicit by default in the abuse of animals. Others have taken a less polarised view but still argue that there are conflicting motivations experienced by veterinary surgeons that aim to advocate for animals and yet must also make a profit from their services (Main, 2006). This conflict must make a duty of non-maleficence impossible to maintain.

Aside from the conflicts presented by the wishes of animal owners who provide consent and pay for veterinary services, there is a further conflict in the veterinary setting which is particularly significant in the case of living animal donors. Unlike the case for human medical professionals, there is much less focus on veterinary patients as individuals. In the aforementioned oath it is not entirely clear whether the veterinary surgeon is being directed to promote the welfare of all 'animals' potentially at the expense of the welfare of an individual animal; good welfare outcomes for *animals* might well be achieved by causing great harm to an individual *animal* donor.

To what extent can a harmful veterinary procedure be justified solely by benefits to other animals? This question is an important one for the profession more broadly and the uniquely harmful nature of living donation practices means analysis of this developing area is likely to improve understanding of this dilemma. One reason a veterinary surgeon, who is charged with protecting animal welfare, must consider more than the health of one animal patient at a time is because the health of some animals is unavoidably linked. This might be the case in a flock or herd of farm animals or a group of pets who live together because they can transmit disease to each other. Indeed, the potential for ethical approaches to human public health to be applied to herd animal disease has been explicitly argued (Hartnack *et al.* 2009). Such a commitment to the health of the 'group' is understandably the concern of a veterinary surgeon and might permit them to perform tests or treatments on healthy and sick individuals with the aim of maintaining the health of the whole group, even when the procedures are painful or carry risks. This scenario is not so different from a human physician who must consider the health of human families and societies and perhaps sanction public health measures which may not ultimately benefit every individual and may even carry potential risks e.g. vaccination (Hobson-West, 2003). The important point to be made here is that because members of some animal 'groups' are linked in their health status, such interventions *aim* to benefit all individuals, not some individuals at the expense of others.

In this way, as for human patients, a veterinary surgeon might well perform a harmful procedure with the aim of benefitting the patient *and* other animals. The best interests section later argues that even animals which are not kept together and are not under the care of the same veterinary surgeon might be able to both benefit through blood banking and thus their interests are linked. In cases where the interests of animals are in no way linked, it is very difficult to understand why it should be permissible for a veterinary surgeon to harm one animal in the interest of another, regardless of whether or not they belong to the same species or are under the care of the same veterinary

surgeon. Given that all animals must be assumed to have the same degree of moral interest in their own bodies, the only rationale for such an action would be that it is based upon the wishes of the animal owners, which seems to contradict with the veterinary surgeon having 'first regard for animal welfare' in such ethical dilemmas. Since this policy wording predates the clinical area of animal donation, it might be argued that the rationale for group welfare decisions is as discussed above, and that the harmful nature of living donation practices necessitates a re-evaluation of the precise meaning of 'the group'.

According to this analysis, it does not seem permissible for a veterinary surgeon to cause harm to one animal for the sole benefit of another animal; at the very least, the animal that is harmed must also be considered to benefit because it is part of the group who are being treated. Such an assessment would mean that for living animal donation an animal may be harmed only when it is also considered to benefit, either directly or because it is part of the group who are benefiting from the donation (such as in the case of banked blood). In the section on best interests (section 4.3.3), the balance of benefits and harms which is permissible for animal donors will be further explored.

In summary, this section has argued that UK veterinary surgeons have a duty not to harm animals according to their oath to protect animal health and welfare. However, this policy wording is ambiguous with regards to whether individual animals may be harmed for the greater benefit of other animals. Whilst a group approach to animal health may be permissible, the harming of one animal with no expectation that they may benefit was considered to be outside the veterinarian's duty to have 'first regard for animal welfare'. Therefore, in the case of living animal donation a degree of benefit for the donor animal must be identified.

Farewell to altruism?

DeLuca *et al* (2006) assert that canine blood donation 'I*s essentially an altruistic process'* (p. 137*)*. In Chapter 3 the argument was made that altruistic

constructions of blood donation in humans (Titmuss, 1970) have been replaced by those of mutuality (Busby, 2004), where both the donor and the recipient are argued to benefit. Furthermore, the relevance of altruism to the ethical justification of living human donations more generally is becoming less clear and the prohibition of payment for donations has been challenged (Shaw, 2015; Moorlock *et al*., 2014; Harris and Erin, 2002; Stacey-Taylor, 2005).

For animal donors, who as argued above should always benefit from their donation, this alteration in perspective regarding altruism may prove particularly beneficial. What is different about the case of non-altruistic animal donations is that some of the benefits which have been identified as persuasive for human donors, such as payment, would be likely to translate to a benefit for the animal's owner rather than the animal themselves. In which case, there is a significant potential for conflict between the interests of the animal who is donating and the interests of the owner who is benefiting. For this reason, in addition to the concerns raised earlier regarding the influence of payment on voluntary decision making, any payment or inducement for animal living 'donation' may be more ethically problematic than it is perceived to be for human donations.

In the next sections, the benefits of animal donation will be considered more fully and the later empirical chapters identity novel benefits for the owners of animal blood donors which it is argued may well create interspecies conflicts of interest.

Psychological benefits

The need to identify a strong emotional bond between organ donors and recipients rather than just a genetic link is considered particularly significant for non-consenting human donors (Chapter 3). For living animal donors this is likely to be the only legitimate psychological benefit of organ donation which could exist and so the establishment of a close emotional bond between the donor and recipient animals would be necessary in every case.

Living unrelated human donations have forced authors to consider the psychological benefits of donation which might exist outside an emotional relationship (Chapter 3). That 'feeling good' about donation is a significant benefit for non-related human donors of blood (Bednall *et al*. 2015) and (reportedly) solid tissues (i-news, 2014) represents a critical difference for this comparative study since an animal's lack of understanding renders them not only unable to consent but also unable to benefit from understanding that they are making a donation.

Human donors who report 'feeling good' about donating to a stranger, even when the outcome of the transplant will have no effect on them, raise interesting ethical questions concerning how such psychological benefits might 'stand-alone' from donation outcomes. In the veterinary context, the capacity to consent to a donation is awarded to the human owner rather than the donating animal. Might the human owner also experience the psychological benefits from their donation decision? This question will become very important in the later empirical chapters. Here the point must be made that if ethical questions are raised by human donors experiencing a psychological benefit which is not related to the donation outcome, then even greater questions must be raised by the possibility that one individual might experience such a benefit when consenting to donation on behalf of another individual.

In summary, the psychological benefits of donation for animals are restricted to those donors with an emotional bond to the recipient. The animal donor's lack of capacity means that they will not benefit psychologically from donating to unknown recipients, unlike many human donors. However, the possibility that animal owners may benefit psychologically from consenting to their animal's donation was raised.

Familial benefits

Familial benefits from human living donations have been argued to potentially enhance or conflict with individual donor benefits (Taylor-Sands,

2015; Wilkinson, 2015; Buchanan and Brock, 1990). This creates the potential for tensions between the donating individual and their family unit. Familial benefits are suggested to exist because of close emotional ties between the many individuals who might be involved in the donation process (Bailey and Huxtable, 2016; Elliot, 1995, Crouch and Elliot, 1999). If such ties exist between humans and non-humans who are connected by veterinary donation practices, then the questions raised by familial benefits might also apply in the veterinary setting.

That humans might be emotionally connected to their pets is not a controversial statement and the degree to which humans and animals can be suggested to connect as 'family' is an area of current interest for some sociologists (Charles, 2015). Recent research suggests that animals can also respond to human emotions, to the extent that even photographs of unknown humans in a negative emotional state can affect their behaviour (Smith *et al.*, 2016). If we accept that animals and humans can exist in a state of emotional connection then it must follow that changes in emotional state brought about by animal donation will have an overall effect on this interspecies 'family' unit. This has significant implications for how the benefits of donation for animal donors might be perceived and also whether any benefits for the family unit as a whole might conflict with the interests of donating animals.

In the empirical chapters, the concept of animals as family members in the donation context is explored in some detail.

The illusion of donor benefit?

That a non-consenting donor is at risk of exploitation because donation procedures might be justified on the basis of benefits which do not actually exist can be directly transferred from the medical ethics literature (Fleck, 2004; LRCC, 1992; Crouch and Elliot, 1999) to the case of animal donors. Whereas in human donors this situation arises when psychological benefits for the donor are exaggerated or fabricated, this is not such a concern for

animal ‘donors’ where the only possible psychological benefit is that of retaining a close companion.

However, in the veterinary setting, other invalid benefits for donors may be promoted. The previous discussion concerning the use of shelter cats as organ donors on the basis that they are then given a loving home is, it could be argued, an example of an illusory donor benefit. Yeates (2014) argues that in this situation:

> The transaction is not beneficial if the owner then unscrupulously euthanases or neglects the adopted cat, or if the source cat were to be rehomed anyway (Yeates, 2014:p406).

However, beyond the question of whether the eventual outcome is beneficial for the animal donor, it must be asked whether there is a fundamental problem with such an arrangement? It was earlier suggested that rather than representing a potential benefit to donors, practices which relied upon societal inequality between donor and recipient should be considered to generate wider harms for animal donors. As such, the practice of using an animal as a living donor which has a lower societal worth than the recipient should be considered widely harmful and would necessitate the identification of significant other donor benefits.

It has also been suggested that dogs in a shelter environment might benefit from being blood donors because they will receive additional health checks and blood screening (Mutinelli *et al.*, 2013). The authors argue that such donors are not exploited because they are benefitting from the process. Whilst blood tests might be a legitimate part of the donation process, they only benefit animals that have an illness which is undiagnosed. If shelter animals are provided with adequate healthcare then additional blood tests and health checks are only beneficial by chance, if they detect something which has been missed. Creating the remote chance of a benefit is unlikely to be sufficient to justify a living donation procedure, particularly as the wider harms discussed above would also apply in this example.

In summary, illusory benefits are a significant risk for animal donations and ethical justifications should take account of both the validity and likelihood of any identified donor benefits. The next section moves on from donor harms and benefits to consider the relevance of best interest justifications to living animal donations.

4.3.3 Best interest justifications.

In human medicine 'best interest' arguments are made for non-consensual donation, where the benefits to the donor can be shown to outweigh the harms of donating (Wilkinson, 2011; Van Assche *et al*., 2014). It has already been argued that living donation may harm an animal in several ways and that such practices cannot be justified by benefits to other animals alone. This chapter has also identified comparatively reduced possibilities for donor benefit in the animal context. It might therefore be difficult to justify many living animal donation practices according to the best interest of the donor. Whilst it has already been argued that UK veterinary surgeons may not harm their patients solely for the benefit of another animal, the question remains whether veterinary surgeons are always obligated to act in the best interests of their animal patients?

In a recent Animal Welfare Strategy launch the president of the British Veterinary Association asserted that:

> As vets, we recognise that we are part of an interdisciplinary community seeking to promote the **best interests** of animals and improve their treatment, wherever they are **used or impacted on by people**. [.....] Vets' opportunity to be **advocates for animals** may be the greatest of all those who act in the interests of animals - and we have clear social, professional and legal responsibilities to do so (Wensley, 2016) emphasis added.

This overriding focus on an animal's best interests arguably places the veterinarian in a comparable position to the paediatrician, who is motivated

solely by the best interests of his non-autonomous patient (Fettman and Rollin, 2002) and this 'paediatrician' comparison has indeed been made directly by the BVA in support of its aforementioned strategy:

> A comparison with **paediatricians** is relevant: we do not expect a doctor to approach questions of a young child's health and welfare with a parent's wishes, or the doctor's career development, as the focus of decision-making. We expect a paediatrician to prioritise the best interests of their young patients, enabled by the child's parents/guardians and the doctor's skills and resource. Promoting a **patient's best interests** sometimes requires **ethically appropriate influencing** of animal owners (BVA, 2016:p.20) emphasis added.

The British Veterinary Association claims that, as in human medicine, veterinary procedures should be conducted solely on the basis that they are in the animal's best interests, raising the boundary of professional obligation beyond no-harm to a positive outcome for animal patients. It is not difficult to see how such a stance may be reached since the earlier assertion that a veterinary surgeon may not harm their patient does not seem adequate to fulfil the professional oath made to prioritise animal welfare. If some veterinary procedures are merely non-harmful then why are they performed? Presumably to create a benefit for the animal owner, begging the question of how a benefit for owners with no harm for animals equates to an animal welfare priority, as required by the RCVS? A recent ethics blog makes a very similar argument, suggesting that:

> The [RCVS] code imposes on veterinarians an ethical duty to act at all times in a way that does not compromise the health or welfare of their animal patients. I will refer to this duty as a duty to act in the best interests of the animal (Foster, 2016).

The best interest argument for veterinary procedures is logical and persuasive; however, the challenge is posed by the potential for conflicted interests between the animal and its owner. The BVA suggests this may be

dealt with by appropriate influencing of animal owners, but how does this relate to the necessity for an animal owner to give valid informed consent?

It is not an unlikely scenario that an animal owner will want what is best for the animal patient and reflect this in their discussion at the point of consent. However, the autonomous decision of an owner made according to their legal rights over an animal might also be influenced by many other factors aside from a course of action which results in the best welfare outcome. Some owners may not know what is in their animal's best- interests (e.g. due to limited experience of that species (PAW, 2016)). Some may not be motivated to achieve it (e.g. due to conflicting financial, sporting or lifestyle interests (Campbell and Sandøe, 2015)). Even where animals are primarily considered to be of emotional value, as in the case of companion animals, a strong emotional bond might result in requests for prolonged palliative treatment or surgical procedures which, it has been argued, might not always reflect what is actually best for the animal patient (Palmer *et al.*, 2012). It has also previously been argued that veterinary surgeons, as animal welfare advocates, do have an obligation to positively influence owner decision making by promoting the course of action which is best for the animal (Main, 2006, Yeates and Main, 2010). Fettman and Rollin (2002) maintain that if the veterinarian were able to be solely concerned with the wellbeing of the animal patient then there would be no need for veterinary consent at all:

> An extreme view of patient advocacy might lead one to conclude that there is no need for informed consent from the owner, based on the assumption that the veterinarian knows what is best and need not explain his/her decision-making process in selecting treatment. In fact, there are situations where veterinarians are asked to serve only as a patient advocate, when an owner adamantly insists that anything be done for his/her beloved pet, regardless of the cost or inconvenience to the owner, as long as the animal does not suffer unnecessarily or without clear benefit (Fettman and Rollin, 2002:p. 1388).

Of course, in reality such situations are unusual and in most cases a veterinary surgeon will be attempting to balance their obligations to the animal, business considerations and the wishes of the owner (Main, 2006). Even if it were the case that veterinary surgeons could choose to promote the interests of the animal at all times, it is the potential for tensions surrounding what is best for the animal and what is requested or refused by the owner which underlies the very need for owner informed consent. Viewed in this way it might be suggested that owner informed consent exists *because* of the impossibility of the veterinary transaction being based solely on decisions which are unanimously agreed to be the best for the animal's welfare.

Interestingly, the ability of veterinary surgeons to determine what are in animal best interests is also not universally accepted. For example, Corr (2013) raises the impossibility of anyone knowing whether an animal would choose certain treatments for itself:

> Whilst it may be possible to identify 'best interests' for a fellow human being, how does one know … for example, whether a hemiplegic dog would choose a life in a cart over euthanasia? (Corr, 2013:p. 194).

The BVA policy statement regarding best interests, whilst defensible, appears unfeasible according to the academic discussion above. The best interest argument for animals thus mirrors that for human patients where most debate consists of not whether best interests should be promoted but how this may accurately be achieved (Chapter 3).

Whilst the broader policy questions raised here will be considered again in the concluding chapter, the comparative analysis informs how such problems might be approached in the donation context specifically. In Chapter 3, it was argued that the doctor's obligation to act in the best interest of a non-consenting donor considerably limits the authority of any third party consent. Whilst the discussion above relates to the therapeutic treatment of animals, and the problems associated with obtaining an owner's consent to treatments they do not support, it appears simpler to apply the scope of

authority argument to the case of living animal donations because the procedure is uniquely non-therapeutic. Acting in the best interests of the donor animal against the owners wishes would only necessitate a veterinary surgeon refusing to conduct the donation procedure, based on their own professional obligations. An animal owner's consent, like third party consent for human donation, cannot be used to compel a veterinary surgeon to perform the procedure. Interestingly, in the rare event that living donation is argued to be in the best interests of an animal but their owner refuses to consent, the veterinary surgeon *would* find themselves in the conflicted position described above whereby they cannot proceed with therapeutic treatment without the owner's consent. This is different from the equivalent human medical scenario because of the owner's property rights and the lack of bodily rights for animals.

Furthermore, whilst determining what is in the best interests of animal patients in the broader therapeutic context is challenging, this comparative analysis has identified specific benefits and harms which are relevant to living animal donation which should assist greatly with the application of such a justification to living donation practices. In the animal donation context, where the procedure is always physically harmful to some degree, the best interest justification could only be made where donor benefits can be shown to outweigh these harms. Significantly, moving away from a consent justification for living animal donation and considering a best interests justification brings many aspects of formalised harm-benefit analysis which are crucial to the justification of animal research to the fore. Although, in the case of a best interest justification, the analysis is simplified to some degree in that the harms and benefits apply to one individual animal only.

For example, the problem of balancing different types of harms and benefits has been raised in the animal research context where the harms to animals must be justified according to benefits to society:

> How can expected study benefits and animal harms be weighed against each other? What is the unit and common currency that allows this weighing to be performed? (Grimm, 2015:p.22).

This argument connects with the situation of human donors where the psychological benefits of donating have been suggested to be hard to accurately balance against physical harms in a best interest justification (Fleck, 2004). For animal donors the situation is somewhat simpler due to their reduced capacity to experience psychological benefits; some donations such as blood donations could conceivably create a physical benefit *if* for example banked blood is made available to donors when it is needed. The donation of solid organs cannot be argued to provide a physical benefit and therefore could only be justified according to a psychological benefit when the recipient and donor have a close emotional attachment. Again, for animal donors this justification seems simpler because the reduced capacity of animals means they can only be argued to have a close emotional attachment when they are living together; the idea of distant genetic relatives having a meaningful relationship cannot be extended to the animal field. Of course, the likelihood of unrelated animals that live together being matched as donors is poor, meaning such a justification could only rarely be applied.

In summary, this section has argued that according to policy statements (RCVS, 2014b; BVA, 2016) and by logical extension of the no-harm argument (Yeates, 2009; Foster, 2016), UK veterinary surgeons are obliged to act in the best interests of animals. However, vigorous academic discussion is centred on the difficulty of adhering to such an obligation (Main, 2006; Corr, 2013; Fettman and Rollin, 2002). It was argued that in the donation context the non-therapeutic nature of the procedure means that a veterinary surgeon may refuse to perform the donation, which would not interfere with the animal owner's legal rights. The comparative analysis has led to the identification of specific harms and benefits which may be used to justify animal donation according to their best interests, where the benefit to the donor must be shown to outweigh any harms. This is likely to be restricted to

the low risk donation of blood with access to banked products or rare examples of organ donation to a companion.

4.4 Summary of donor harm, donor benefit and best interest justifications.

The second half of this comparative ethical analysis dealt with donor harm, donor benefit and best interest justifications. The physical similarities between all mammals were argued to mean that comparable physical harms can be expected for animal and human donors. However, the different donation practices applied to some animals may result in greater harms resulting from the donation of similar tissues; this is argued to erode the usefulness of harm thresholds based only on the regenerative nature of donated tissue for animal donors. Whilst current literature focuses on the physical harms of veterinary donation (Couto and Iazbic, 2005, Izabic *et al.*, 2007, Killos *et al.*, 2010, Day and Kohn, 2012), the potential for psychological harm in the form of fear and distress should be considered equally significant for animal donors because of their lack of consent. The animal donor's lack of independent identity and the wide variety of accepted societal uses of animals (Joy, 2010; Rakhuyun, 2008; Gheaus, 2012), result in a far greater potential for wider harms to follow living animal donation procedures. For example, some existing animal donation practices were shown to depend upon societal inequalities between animals (FCRFIC, 2016; UDC, 2016) and it was argued that in this case they must be considered to cause wider harms to animal donors.

Whilst the requirement to intend a therapeutic outcome from animal donation is comparable with the discussion of human living donation, the addition of the 'immediate group' clause in UK regulatory guidance creates a lack of clarity concerning whether the intended benefit merely *defines* or adequately *justifies* the animal donation procedure (RCVS, 2016). However, UK veterinary surgeons are argued to have a duty not to harm animals according to their oath to protect animal health and welfare (RCVS, 2014b);

again, this policy wording is ambiguous with regards to whether individual animals may be harmed for the greater benefit of other animals. It was argued that whilst a group approach to animal health may be permissible, the harming of one animal with no expectation that they may benefit is outside the veterinarian's duty to have 'first regard for animal welfare'. In the case of living animal donation, therefore, a benefit for the donor animal must always be identified.

The psychological benefits of donation for animals are restricted to those donors with an emotional bond to the recipient. The animal donor's lack of capacity means that they will not benefit from donating to unknown recipients, unlike many human donors. However, the possibility that animal owners may benefit psychologically from their animal's donation was raised. Illusory donor benefits (Fleck, 2004; LRCC, 1992; Crouch and Elliot, 1999) are a significant risk for animal donations and ethical justifications should take account of both the validity and likelihood of any identified donor benefits.

According to policy statements (RCVS, 2014b; BVA, 2016) and by logical extension of the no-harm argument (Yeates, 2009; Foster, 2016), UK veterinary surgeons are obliged to act in the best interests of animals. However, vigorous academic discussion is centred on difficulty of adhering to such an obligation (Main, 2006; Corr, 2013; Fettman and Rollin, 2002). It was argued that in the donation context the non-therapeutic nature of the procedure means that a veterinary surgeon can refuse to perform the donation without affecting the animal owner's rights. The comparative analysis has led to the identification of specific harms and benefits which may be used to justify animal donation according to their best interests where the benefit to the donor must be shown to outweigh any harms, this is likely to be restricted to the low risk donation of blood with access to banked products or rare examples of organ donation to a companion.

4.5 Conclusion

Chapter 3 and Chapter 4 employed a comparative approach to answering Research Question 1:

RQ1 - To what extent can the ethical justifications for living human donation be applied to living animal donation?

The ethical justifications for living human donation were identified as informed consent and donor best interest arguments. These arguments were examined and their underpinning theories and principles identified alongside any limitations or risks associated with their use in this context. The arguments were then re-explored for their relevance in the veterinary donation context, considering how the identified underpinning theories and principles might be adapted or applied and what the limitations and risks associated with their use in the human context might mean for living animal donation. In this section, the relevant outcomes of the comparative analysis are summarised and drawn together, broadly outlining the findings of the normative phase of the research before the empirical analysis is introduced.

The comparative ethical analysis argued that the difference in ethical purpose between a human patient's consent and an animal owner's consent, alongside the lack of capacity of animal donors, means that equivalent informed consent justifications cannot be directly applied to living animal donations (section 4.2.1)[14]. Whilst animals cannot consent to their own treatment, they are argued to have morally considerable bodily interests (section 4.2.3) which may conflict with the legal rights that underpin their owners consent. The comparatively reduced scope of authority of animal owner consent reduces the threshold of harm which their consent may authorise (section 4.2.3). Furthermore, the owner's authorisation of any harm may conflict with a veterinary surgeons comparable duty not to harm their patients (section 4.3.2).

[14] Due to the volume of references which are used in the arguments made in Chapters 3 and 4, they are not listed again here.

Best interest arguments can be adapted for animal living donation according to the argument that a veterinary surgeon must act in the animal patient's best interests (section 4.3.3). The best interest argument therefore outweighs the authority of owner consent where donation practices are considered harmful. A clinical benefit from donation is necessary to define human and animal living donation as a clinical procedure (RCVS, 2016). However, living donation justified according to the best interest of the donor animal would result in physical or psychological benefits for the donor which outweighs any physical, psychological or wider harm (section 4.3.3).

For human donors, informed consent can justify living donation to a certain threshold of harm (section 3.2.3) but non-consensual donations must be justified according to the donors best interests (section 3.3.3). Whilst an animal owner's valid informed consent is necessary for all living animal donation (section 4.2.1) it is not sufficient to justify any donation which is not in the best interest of the donor (section 4.3.3)**.** The different interaction between the justifications of informed consent and donor best interests in the human or animal medical settings creates an answer for Research Question 1:

> **The ethical justifications for living human donation *cannot* be directly applied to living animal donation. However, an adapted comparative justification may be made when living donation is in the animal's best interest *and* has the owner's informed consent.**

Such a comparative justification encompasses certain empirical and professional assumptions. Significant empirical assumptions relate to the validity of the owner's consent (section 4.2.2), the validity of identified donor benefits (section 4.3.2) and the accurate assessment of donor harms (section 4.3.1) during the evaluation of a donor's best interests. Invalid owner consent would result in an infringement of their property right (section 4.2.1). Invalid best interest justification would result in moral harm to the animal (section 4.2.3).

Significant professional assumptions relate to the requirement for veterinary procedures to be conducted in the best interests of individual animals (section 4.3.3). Should this assumption prove to be false, the justification would revert to a no-harm justification, also dependent on interpretation of the veterinary surgeon's duty (section 4.3.2). In the case of no such obligation on the part of the veterinary surgeon, the animal owner's consent could permit the infliction of harm to a lesser threshold than that permitted by first order human patient consent, due to its comparatively reduced scope of authority (section 4.2.3).

A limitation of this comparative analysis is that it is dependent on current ethical approaches to human living donation which some authors have argued are not permissive enough for non-consenting donors (Wilkinson, 2011, Van-Assche *et al.*, 2014). Whilst the arguments made represent a comparative justificatory approach at this time, should approaches to living human donation change in future years the stated arguments may need to be revised.

The next two chapters report the empirical phase of the research, conducted in the context of canine blood donation. The analysis informs some of the identified empirical assumptions of the comparative ethical justification including the quality of owner consent and constructions of donor and recipient benefits.

Chapter 5 first explores the themes of owner expectation, understanding and human-animal comparison which are considered in light of their implications for the quality of owner informed consent.

5. AN EMPIRICAL ANALYSIS OF CANINE BLOOD DONATION: EXPECTATION, UNDERSTANDING AND HUMAN-ANIMAL COMPARISON IN CONSENTING ANIMAL OWNERS.

5.1 Introduction

The following two chapters analyse empirical data collected in the context of living canine blood donation and highlight sociological themes which extend or illuminate aspects of the previous normative discussions. They respond to Research Question 2:

RQ2 - How does the different social context of veterinary donation inform or undermine the proposed ethical justifications?

As such the empirical chapters are structured around the two important identified ethical justifications of informed consent and donor best interests (although some of the analytic themes are relevant to both of these justifications). Both chapters first introduce relevant literature from medical sociology and the sociology of donation, before identifying and exploring key themes from the novel empirical data. Finally, each chapter will discuss the meaning of the data analysis from both a sociological and normative perspective.

5.2 Medical sociology and consent to living donation.

The previous normative chapters have unpacked the justification of informed consent and identified ethical risks concerning both the quality and scope of authority of informed consent in both human and animal medical contexts. Informed consent has been identified as an area where a considerable degree of crossover exists between ethical and empirical research (Dawson, 2005). The sociology of medicine offers contributions from authors interested in sociological aspects of a human patient's informed consent, both generally (Corrigan, 2003) and specifically in the context of living donation (Alaishushki *et al*., 2008; Busby, 2010; Shaz *et al*., 2009, Cattapan, 2016; Valapour *et al*. 2011). Whilst questions concerning the scope of authority of informed

consent generate vigorous ethical argument, questions which relate to the quality of consent often have a very clear empirical perspective.

Some aspects of valid informed consent which have particular sociological importance have already been raised earlier in the thesis, for example, the possibility of legally valid but ethically meaningless consent (Dunn, 2016) is enhanced by work which highlights poor information provision (Cattapan, 2016) or a voluntary lack of understanding in those consenting to donation (Valapour *et al.*, 2011). Furthermore, there are claims that our understanding of social influences on the validity of consent could be improved (Wilkinson, 2011).

Empirical social science has added depth and detail to the questions which have been applied to the validity of a patient's consent. For example, Corrigan (2003) argues that patients do not always, in fact, understand the information that is given to them or are not being given the information that they require. Corrigan substantiates her arguments with qualitative interview data drawn from a study on the process of consent as experienced by participants of clinical drugs trials; concluding that anxiety, expectation and implicit trust in doctors and medical science means that '*Informed choices based on an adequate understanding of the information and on careful consideration of the potential benefits and risks, are difficult to achieve in practice*' (Corrigan, 2003:p.789). Corrigan's work serves as an example of how empirical sociological studies can illuminate the social context within which consent is given, highlighting not just the extent of a patient's understanding but also the role of social themes such as expectation and trust in generating poorly informed patients.

That trust might also be a significant feature in a living donor's decision making has been raised by Lipworth *et al.* (2011) who published a systematic review of sociological studies into tissue donation to biobanks. They suggest that donation to biobanks is a complex process which is shaped by donors' embeddedness in a number of social contexts and also by complex relations

of trust in biomedicine. Although this thesis is concerned with living donations for direct clinical use, the concept of donor trust and the implications for donor consent appear to also be relevant in the data analysis which follows.

Empirical work which specifically considers the giving of blood has identified limited understanding of the processes which occur after the blood has been taken. In a paper based on blood donor questionnaires Alaishuski *et al.* (2008) suggest that blood donors do not fully understand either the risks of blood donation or the potential uses of the donated blood, for example, research testing. Likewise Pfeffer and Laws (2006) use focus groups to explore the narratives of patients and healthcare professionals who had been involved in blood sampling and blood tests in hospitals. They conclude that neither the patients nor the medical professionals had a full picture of how blood produced for tests circulates around the hospital. Similarly, Busby (2010) analysed interview data from umbilical cord blood donors with a specific focus on their consent. Busby found that the donors' narratives were very focused on the needs of sick children requiring stem cell transplants and that the donors expressed high expectations for future applications of stem cell therapies. This leads Busby to raise concerns that the '*complex and multiple uses of tissues and related data might be oversimplified in the consent process'* (Busby, 2010:p.22).

What appears to complicate the consent process for blood donation (and other forms of donation) is that a format for general medical consent is being applied to a procedure which is not of direct clinical benefit to the donor and that the benefits of donation might be distant and poorly defined. Shaz *et al.* (2009) describe an interesting study where consent forms for blood donation in the US were evaluated according to the guidelines of consent for research subjects. They conclude that the consent forms did not contain common essential information or blood donation specific information which would have been required for research subjects, and conclude that national guidelines are needed for the informed consent process in blood donation (Shaz *et al.*, 2009).

Finally, alongside understanding, voluntary decision making was also earlier established as a requirement for valid consent. Burnell *et al.* (2015) interviewed kidney donors to explore coercion and choice in parent-child live kidney donation. They argued that even when a donor's desire to help a sick relative results in them experiencing a 'no choice' situation, their decision to donate can still be considered autonomous and that *'using one's own moral values to constrain one's own choices can be compatible with voluntary decision making'* (Burnell *et al.*, 2015:p. 304). This connects directly with the conceptual discussion of justified uninformed consent in Chapter 3. Since questions of choice and obligation also feature in the interview data analysed in this chapter, this perspective will later be discussed further for its implications in the veterinary context.

In summary, patient informed consent has been explored sociologically and this has resulted in a fuller understanding of the conditions and barriers which encourage or prevent full understanding and voluntary decision making. With regards to donation specifically, the themes of trust, optimism and expectation appear to have an important role in explaining why donors may not always have a full appreciation of the processes involved in banking and using donated blood and tissue.

The data analysis which follows has some resonance with this existing sociological work on human blood and tissue donation but also introduces novel themes which are particular to the veterinary context.

5.3 Data analysis

This section explores four analytic themes; the owners' understanding of the canine blood donation process, their expressed expectations for the use of the donated blood and the extent to which comparisons were made between human and animal blood donations. Finally, data from veterinary professionals is analysed to show how their accounts of canine blood product use might not always tie in with the donor owners' expectations. These analytic themes represent a combination of deductive themes arising from

the normative analysis and existing literature (e.g. understanding) and inductive themes which emerged during the data analysis (e.g. blood wastage), as previously outlined in the methodology chapter.

The data analysis section uses data from interviews with pet dog owners, RGT kennel owners and veterinary professionals. The different stakeholder groups of pet dog owners and retired greyhound kennel owners (as described in the thesis introduction) are here referred to as 'Owner' or 'Kennel owner'. As was highlighted in the methodology chapter the degree to which these different datasets were analysed is not symmetrical due to differences in sample size and homogeneity. Whilst the pet owner data was interpreted and theorised with innovative sociological themes being identified, for the other groups the data is taken as a more literal indication of meaning. Furthermore, only certain aspects of the analysis of each data set are used here for their value in responding to the chapter themes. For clarity, reference to the existing literature is not made throughout this section, but is addressed in the final discussion section.

In the discussion and conclusions section it is argued that an acknowledged poor understanding of the canine blood banking process raises questions over the quality of an animal owner's consent. Furthermore, owners' clear but potentially unfounded expectations and concerns regarding the benefits and risks of banking canine blood create obligations for animal blood banks, veterinary surgeons and their governing bodies. Finally, it is argued that the owners' tendency to extrapolate their understandings of human blood banking processes and systems to their animals creates a specific problem by fostering a potentially unrealistic preconception of animal blood banking systems upon which donation decisions are being based.

The first analytic theme of understanding is now addressed.

5.3.1 Understanding

Whilst the dog owners generally stayed with their pet during the donation and so had a good understanding of the donation process itself, they

commonly expressed limited knowledge of what happened to the blood after it had been donated:

> *I have no idea what happens to it [the blood] afterwards, no none at all (Owner 7).*
>
> *I don't really know what they do with it…I'm assuming there is a centralised location…I really don't know (Owner 8).*
>
> *I just assume it's used in surgery and things like that…I don't really know anything about that …I just assume it goes to dogs (Owner 10).*
>
> *Well we don't know a great deal I mean presumably it goes back to the laboratory or whatever and goes through various processes and then when there's an appeal for blood it goes out presumably (Kennel Owner 1).*

In these quotes dog owners claim a lack of knowledge about many aspects of canine blood banking and blood product use such as where the blood goes, the processes which will be applied to it and also how it might be allocated, accessed and used.

The pet owners' accounts generally placed responsibility for their lack of understanding with themselves, for example, by indicating that they had not read the information that was given to them or that they had forgotten it:

> *I probably have got leaflets but you know you don't read them do you, what they do [with the blood]? (Owner 14)*
>
> *I did look into it all months and months ago and I've forgotten about it (Owner 15).*

However the owners did not appear to feel unhappy about their lack of knowledge. Some owners volunteered their perspectives on why they felt their lack of knowledge was acceptable; their arguments indicated that knowing the donated blood was benefiting other dogs was sufficient:

I've never looked into it. As long as he's happy and I know some dogs somewhere have benefitted I'm quite happy (Owner 17).

That's all I really need to know, I don't really need to know [the ins and outs of it] because I do it for nothing, everybody else does it for nothing (Owner 6).

In the above quote the owner relates the idea of her offering her pet's donation 'for nothing' to her accepted lack of understanding concerning what happens to the blood. This association between the donation as a 'gift' (Titmuss, 1970) and accepting the limited knowledge that it is benefitting other animals begins to open up the theme of trust between the animal's owner and the blood bank. This theme, which is prominent in sociological work on human donation, became quite clear in some owner's accounts:

To be honest I think veterinary practices put in an order for it and it's dispatched quickly, but other than that I haven't got a clue… Do you know what I think it is? ***We've done our bit*** *and off you go…But like with us humans; do we know what happens to our blood after we've given [it]? We have our cuppa and biscuit and off we go, we don't sit and think about what happens or where it's gone or anything. (Kennel Owner 2)*

In this quote the owner suggests that by offering the dog as a donor they have 'done their bit', implying that concern over what happens to the blood after this point is the responsibility of someone else and not the pet owner. This account also introduces the recurring tendency for owners to compare human and animal blood banking systems which will be returned to later.

In summary the animal owners were candid about their lack of knowledge surrounding what happens to the blood after it is donated. They took full responsibility for this situation, which they felt was similar to human blood donation, and explained that they only needed to know that they were

benefitting other animals. The next section explores the expectations that the owners held with respect to this aim.

5.3.2 Expectations

In spite of pet owners' claimed lack of knowledge around the specific uses of banked canine blood they were comfortable expressing their views on what they expected their 'donation' to achieve. The donations were expected to save numerous lives and each donation or even drop of blood was presented as highly valuable and highly valued.

Saving lives

The phrase 'saving lives' was very commonly used:

> *It can save another animal's life …that's what spurs me on really when I do it (Owner 6).*

> *I thought that could make the difference between life and death for a dog (Owner 14).*

As such the benefits the owners imagined resulting from the donation were generally quite dramatic. Pet owners sometimes described the lengths they went to in order to achieve their aim:

> *If she can help save one other dog then I think she's doing a good job. It's just cost us a couple of hours but if it, you know, helps save someone else's dog then, you know we're happy. I mean because for us to come here I've taken half a days holiday from work. That would be my ideal outcome; that she's helped save another dog (Owner 9).*

The idea of the blood donation equating to saving lives was also used to defend making the decision to donate their dog's blood without asking questions or thinking too much:

> *I didn't think too much about it, I just knew it was a good idea and it would save lives … If you can help an animal that's about to die*

because of lack of blood then surely you just do it, there isn't a question about it you do it (Owner 6).

This ideal of saving lives was also used by some owners to encourage others to donate their pet's blood. For example, when rehoming canine blood donors, one kennel owner described how she encouraged the new owners to continue supporting the blood bank:

When the dogs get a home we hand on their details and say 'Johnny here has been a blood donor, he's saved lives and if you want to continue this....', and then they get the leaflet (Kennel Owner 1).

Many owners offered a surprisingly literal view of the scale of lifesaving potential that the donated units of blood held. The blood bank had provided the information that each donation could potentially be processed into four separate blood products which led to many owners expecting to save four lives with each donation:

It (the blood donation) gets used on four doggies (Owner 2).

Potentially they've helped save, because each time they come its four dogs, up to four dogs that they can help so that's each time we come that was eight, so four eights is, yeah thirty two isn't it? So it's at least thirty two dogs they've helped so far, it's probably even, probably more because I forget, I've lost count. […] I'm quite impressed that they can help up to four; I always say that because it's nice that they could help so many dogs with this one donation (Owner 4).

The overall impression was of the donated blood being highly potent in its lifesaving potential, meaning it was constructed as extremely valuable:

I'm disappointed that he didn't give blood…because every drop matters (Owner 16).

In the next section, it is suggested that the blood donations being presented as so valuable appears to fuel the expectation that the donated blood was also highly valued by others.

Demand and wastage

The widely held view that blood donations save canine lives was often presented in conjunction with the idea that there was a great demand for the donated blood:

> *I think it gets used quite quickly and I just asked if there's a demand and she said yes the demand is high, they need a lot (Owner 4).*

> *We know it's in hot demand because every now and then we get a, you know a plea 'can we come and have you got any dogs that we can, that we can do?' We did one [blood collection] before Christmas because apparently they were getting really low so it's quite obviously not sitting gathering dust on a shelf in a fridge or whatever (Kennel Owner 1).*

Interestingly the perceived high demand for canine blood was invariably related to information provided by the blood bank themselves, rather than from personal experience or any knowledge about the actual end use of the blood products.

This high demand meant some owners felt very certain that the blood donation would not be wasted:

> *I know the blood is going to be used […] It's not wasted (Owner 1).*

However, some owners still held concerns about blood wastage; one owner described how she had questioned the blood bank staff before agreeing to donate her dog's blood:

> *I wouldn't want to go through all this and then think it was thrown out at the end of it… I know you can freeze it and whatever but I don't*

know all the ins and outs of it so I didn't know…how much waste there was and whether it would all be used (Owner 15).

Another owner described questioning the blood bank staff about whether they would still use a half full bag of blood:

I mean I know we have had the odd dog that has, they have [only] got half a bag from for whatever reason, hasn't happened very often; 'I do hope you're not going to waste that?' 'No-no, no wastage, it will all go to something.' I don't think you'd like to think that half a bag would be wasted. Whether it was human or whether it was a dog (Kennel Owner 1).

Again the dog owners generally exhibited a high level of trust; relying on the blood bank's assurances that blood donations would not be wasted. Within the context of the general lack of knowledge expressed by dog owners, blood wastage appeared to be one the very few areas where trust between the owner and the blood bank might be challenged:

But […] I'd hate to think it was just thrown in the bin […] I think that would be my only concern (Kennel Owner 2).

Interestingly, in contrast to the prevailing image of saving lives which was often linked to donation being 'easy' for the dogs, when talking about wasted blood or the possibility that the recipient dog might not survive, the owners' accounts appeared to shift to what the donor dog had 'been through' for example:

It certainly doesn't upset the dogs donating it; you know it quite obviously does save lives. So it seemed to be a win win situation (Kennel Owner 1).

In contrast with:

I know when my greyhound gave blood …I know the [recipient] dog passed away and I felt really sort of gutted…that my dog had gone

through it and the dog it was benefiting just hadn't made it through (Kennel Owner 2).

This offers a potentially shifting view of the relationship between the donation process and the transfusion outcome whereby the process is not considered difficult if it saves a life but is presented as a lot to ask of a dog when this outcome is not achieved.

In summary the dog owners expressed firm expectations that their donation would save multiple canine lives and that there was a great demand for canine blood transfusions. That the donated blood would not be wasted was reported to be of great significance to the dog owners. This expectation of 'saving lives' is held so strongly that it is not questioned or authenticated by the owners. High levels of trust in the blood bank enable these beliefs to continue and even to be transferred from one dog owner to another.

5.3.3 Human-animal comparisons

Whilst some of the owners' expectations identified above either originated from or led them to seek reassurance from the blood bank, their expectations also appeared to be heavily influenced by what animal owners knew of human blood banking systems:

We haven't got a clue [what happens to the blood] we just know he is doing good. […] I always assume they use it when they do operations…like they do with humans (Owner 19).

In this quote the association between the owner's lack of actual knowledge concerning animal blood banking systems and their extrapolation of human medical knowledge is made explicit.

Some owners compared humans and animals to describe and justify the whole concept of canine blood banking, drawing direct parallels between the value of companion animal and human blood donation:

You know how important it is for humans to give blood, so it's got to be the same for dogs as well (Owner 5).

They need blood as much as we do don't they? (0wner 16)

Furthermore, human-animal comparisons were applied beyond the concept of blood banking and sometimes related to the animal donor themselves with the owners suggesting that their dogs were treated like humans. For example, one owner described how she treated her dog after he had donated blood:

I do treat him afterwards (...) he now does go to McDonalds, we've been discussing that. (..) Yes it's the only time he has ever been but yeah he goes to Mc Donalds afterwards. And I do treat him like a little baby don't I? (Owner 17)

Some dog owners recognised that this tendency to 'humanise' the dogs was likely to have influenced their decision-making when it came to offering their dogs as donors:

I'm sure we think our animals are humans and you know we kind of put [on] our own perspective, and think that they would think that they wouldn't mind (Owner 3).

Furthermore many owners appeared to take pride in their own blood donation status and suggested there was no difference between them donating blood and their decision to offer their dogs as donors:

Both my husband and myself give blood so why not [our] dogs? (Owner 9)

It's the same as me doing it and it's the same as my husband doing it. Somebody needs it so it's no different for the dog (Owner 17)

In such accounts the justification for canine blood donation is suggested to be *no different* from human blood donation (what this means for our understanding of human-animal 'kinship' will be explored in Chapter 6). Very

significantly, with regards to allocation and access to blood products, the owners also tended to rely upon direct extrapolations of what they knew about human blood banking systems:

> *Well I imagine it's like the hospital, it just goes wherever it's needed (Owner 8).*

> *I assume it's similar to human blood, and it just goes off into some bank on some database. And then if a vet needs it they just sort of take it out and deliver to the vets (Owner 9).*

In summary the comparisons which are made between humans and animals by dog owners in the canine blood donation context are quite extensive. The owners' justifications for canine blood banking, their donation decision making and their expectations for the allocation of and access to canine blood are frequently dependent on extrapolated understandings of human blood banking systems.

5.3.4 Canine blood product use

The expectations of the canine blood donor owners appear to be influenced by information from the blood bank and by the owners' understandings of human blood systems. However, their accepted lack of concrete knowledge means there is some possibility that their expectations could be unfounded or unrealistic. The interviews with veterinary professionals provided multiple perspectives on the eventual use of blood products which will be explored in some detail in the following chapter but some of the data analysis is included here for its value in identifying specific discrepancies between the owners' expectations and accounts of canine blood product use.

Cost of blood transfusions

In the donor owners' accounts the reality that the owners of recipient dogs may have to pay for blood transfusions was not at all visible; in fact the frequent comparisons between human and animal blood systems appeared to imply that the owners imagine the canine blood bank was also publicly

owned for access by all. By contrast the veterinary professionals' accounts invariably included discussions over the financial barriers which prevent some owners accessing blood transfusions for their pets:

> *I would say we're still not using blood products as much as probably human medicine is still but some of that comes down to not just availability but costs and whether people want to actually do that sort of intensive care. So I think the blood bank has done its part in providing the products and then there's all sorts of issues. […] I think we feel like we could do more with [blood products] and as a practice think we're in a varied area where sometimes people don't have the money to go forward with these things, because we don't mark the products up but we do have to charge for the intensive time … and sometimes people can't run to that (Veterinary Professional 1).*

In fact it was suggested by the same vet (in an inner city practice) that '*financial reasons*' were the most common reason for pet owners *to* decline a blood transfusion for their pet. It was also appreciated by others that the financial barrier to the use of blood products might reduce the effectiveness of blood transfusions through delaying their use:

> *If you're in practice where you're less attuned to the use of blood products, they're less available to you, maybe there are financial restrictions then you may be inclined, as with many things, you may be inclined to reach for them later down the clinical pathway. And in those cases I think like with lots of other treatments it may well be the perception from GPs that they're of little use because you're selecting the wrong time to use them (Veterinary Professional 5).*

Indeed, one vet in a small rural practice described having found themselves in just such a situation:

> *It worked out OK … I think especially if you try to put the cost out of your mind and don't leave it 'til it's too late […] I'm not sure really, I*

think [transfusion] made a difference …it's not been miraculous, but then I've probably left it a little bit late ..[because of] … the cost really and the inaccessibility of blood or the …proper plasma and all the rest of it (Veterinary Professional 2).

The overall impression given in all the vets' accounts was that cost can be a major factor in limiting the uptake and success of animal blood transfusions. In particular vets in referral practice were able to appreciate the likely potential costs of transfusing a large dog:

I think... the most units…usually red cells that are given to a haemolytic anaemia dog is probably about 9, that is going to be about £2,500 or thereabouts I think. […] If you've got a coagulopathy (clotting disorder)…then again that can very, very easily add up into 4 figures for a medium to large size dog (Veterinary Professional 5).

Inevitably, pet insurance was highlighted as enabling some pet owners to agree to blood transfusions, particularly by the vets working in referral practice who felt that all treatments provided in such a setting were more likely to be taken up by owners whose pets were insured:

Quite often the patients that are here they do tend to be insured, so money is not really that great an issue. [...] I think if there wasn't pet insurance we wouldn't have most of the patients we have in here, just because it's so expensive (Veterinary Professional 3).

This does appear to contrast with the donor owners' ideal of donated blood being used to help all dogs. One donor owner specifically mentioned pet insurance and their hope that blood transfusions would be administered according to need and not insurance status:

You kind of think that maybe it [blood] should be used by people that probably couldn't afford it in a way, so it's not necessarily via insurances and things like that, it's not being used for, it sounds silly, but for fun. But for things that need it. So if a dog's had a major

accident I don't care who it belongs to, take Sam's blood, use it (Owner 17).

This expressed desire to help dogs no matter who they belonged to seems to contrast with the accounts of veterinary professionals working in referral practice where having pet insurance was presented as critical in enabling such treatments.

Whilst vets working in smaller practices felt they were sometimes prevented from offering blood transfusions due to cost, the vets in referral practice gave a different impression of blood transfusion being an accepted part of the treatment they offered:

[If] we think the animal will benefit from a blood product then we'll tell the owner that we think the animal will benefit from a blood product. So to a certain extent I think that the cost aspect is almost either (that) they want to go for treatment or they don't want to go for treatment, it's not an add-on. It's not like saying do you want Happy Shopper baked beans or do you want Tesco's Finest? It's kind of like, you need some beans and they cost this much (Veterinary Professional 5).

This meant that blood transfusion was commonly presented by the referral vets as just one of many elements of advanced treatment or care which pet insurance would pay for:

I think it's not necessarily [just] the blood itself, it's all the medicine service [which] is influenced by the presence of insurance. I don't think blood in itself is different to any, like CT or MRI or any other advanced procedure or advanced treatment (Veterinary Professional 4).

Interestingly, where blood is considered part of a package of advanced treatment, pet insurance was sometimes presented as lifesaving, rather than the blood itself:

> *I think [insurance] probably selects the owners that I see more than anything else. […] for those cases where they are very, very poorly and they need lots and lots of work it [insurance] potentially is lifesaving because it enables the financial aspects of things to be ignored to a certain extent (Veterinary Professional 5).*

Indeed one referral vet described how blood transfusion was not considered by them to be a 'big thing' but a routine treatment:

> *I'm seeing blood as any other kind of treatment. I think [my] situation is different…this is not [a] big thing as [a] treatment. I don't [just] sell blood transfusions, we do whatever we fancy [and] I tell [them] that it is normal. […] I'm not saying it's a big thing. I think [it's] routine treatment (Veterinary Professional 4).*

Such accounts did appear to contrast with the tone and language of the donor owner accounts which presented the blood donation as something special and of great value. The implications of this contrast will be explored in the discussion section.

Wastage of blood

There were also contrasts between the owner and vet accounts of blood wastage with vets presenting the wastage of blood as inevitable. The extent of blood wastage appeared much greater than acknowledged by donor owners and even presented a concern for some members of the profession, who were put off using banked products for this reason:

> *The wastage that's inevitable would get me down […] It's such a short lived product and you've got to have you know a certain amount, over and above, if you haven't got it there's no point being a blood bank is there? It's like being a bank with no money … [or] it's like being a florist, you know you can't have a decent florist shop without having flowers to chuck out (Veterinary Professional 2).*

For veterinary professionals who use blood products routinely the certainty of waste within the practice is recognised as unfortunate both financially and ethically:

> *There will certainly be some units that we use for training purposes that would otherwise go in the bin. […] It's difficult…because you know it's a finite resource you don't want to waste the units that you've got …financially it's a waste for the practice, but it's a waste for the donor as well in that it's just going to go down …you know [the drain] (Veterinary Professional 5).*

In fact, the donor animal and their owner were sometimes brought into conversations surrounding the wastage of blood and they did not tend to feature commonly in the veterinary professionals' accounts otherwise:

> *We do use it [blood] quite often but there is cases sometimes that the blood actually gets slung in the bin because it's been out of date and things […] So it does kind of upset me a little bit […] the blood is actually [from] a real dog somewhere in the UK and I just think if that dog, if the owners went to the trouble of taking the dog in, it donating blood and everything I just think it should be, it should be used regardless and it's a shame that it does go to waste (Veterinary Professional 3).*

This assertion by a veterinary professional that the blood should always be used rather than wasted is particularly interesting when considered alongside the financial barriers which are claimed to prevent blood being used when needed. That blood may be wasted both at the blood bank and in veterinary practices presents a marked contrast to the explicit expectations of the donor owners and the assurances they reportedly received from the blood bank.

5.4 Summary of data analysis

The data analysis highlighted that the pet owners claim limited understanding of what happens to the blood after it had been donated. However, the

owners took responsibility for this situation, indicating that they only needed to know that they were benefitting other animals. The owners appeared to rely heavily upon their understanding of human blood systems and on human-animal comparisons to justify and explain their donation decisions. Their expectations for the blood were clear regarding its potential for saving multiple lives and that it would not be wasted. However, the accounts of the veterinary professionals appeared to conflict with some of these expectations and introduced a more complicated and occasionally conflicted story of the realities of canine blood use.

5.5 Discussion and conclusions

The first analytic theme showed that animal owners claim a very limited understanding of the processing and storage of canine blood and of how the blood products might be allocated and accessed. This would appear to conflict with the requirements for informed consent of sufficient information provision and understanding (DelCarmen and Joffe, 2005; Bateman, 2007). The pet owners felt that their lack of understanding did not represent a different situation from human blood donation. Indeed, returning to the human literature discussed earlier, approaches to addressing this situation have been made regarding human blood and tissue donors. In their paper on consent for human blood donation Alaishuki *et al.* (2008) suggest that adequate information was being provided to donors, but that the information should be repeated and provided in multiple formats. Their suggestion is interesting because in this analysis the animal owners freely admitted that they did not make full use of the information provided[15], however, they felt that they did not 'need to know' such technical details. The work of Fellner and Marshall (1968) was earlier used to show that living kidney donors state

[15] In fact, it appears that the UK animal blood banks do provide detailed technical information on blood product use, for example: *Packed Red Blood Cells are indicated in the treatment of anaemia, blood disorders of oxygen transport, acute blood loss, immune mediated haemolytic anaemia and chronic blood loss. Fresh Frozen Plasma can be used for the treatment of deficiencies of non- labile clotting factors such as anti-coagulant toxicities, plasma protein deficiencies and provide plasma volume expansion for the resuscitation of patients in hypovolaemic shock. (VETBLOOD, 2014) Vetblood - blood products [Online]. Available: http://www.medivet.co.uk/services/vet-blood/blood-products/.*

they do not use a balanced assessment of benefits and risks when making a donation decision. Furthermore, Valapour *et al.* (2011) analyse empirical survey data to argue that kidney donors appear to prioritise an understanding of the benefits for recipients over other key information such as the risks to themselves. This existing literature and the nuanced understanding of the animal owners' accepted lack of knowledge might indicate that the suggestion made by Alaishuki *et al* (2008) would actually have no effect.

The idea of donors 'choosing' to provide consent based only on the information which they feel is important therefore connects with the earlier normative discussion of justifiable uninformed consent in Chapter 3, where it was argued that uninformed consent given on the basis of limited understanding might be justifiable where the consenting party is autonomously choosing to base their decision only on the factors of greatest importance to them. This idea also connects with the empirical sociological work on donation of Burnell *et al.* (2015) who argue that using one's own moral values to constrain one's choices in donation can be compatible with voluntary decision making. For the animal owners who suggested that there was 'no question' or 'no need to think' about donating their animals blood, it seems that their choices were voluntarily constrained by their desire to save canine lives. However, in Chapter 4, a distinction was raised between the ethical implications of such arguments in the human or animal medical context, where the role of consent is different. With respect to requirements for owner consent and best interest justification in animal donation, whilst the owner's uninformed consent may be defensible, voluntarily choosing to make decisions based on limited understanding arguably risks a poor application of the donor best interest test. Whilst the animal owners may wish and be entitled to focus on potential positive outcomes, a thorough understanding of harms and benefits are at some stage required for the donor best interest justification (Wilkinson, 2011). This raises the question of who should be responsible for making such a justification, if the owner is not.

Whilst the owners were satisfied with the level of their knowledge they also held expectations concerning the future use of the canine blood donations. In some cases their expectations appeared to conflict with the accounts of veterinary professionals using blood products, specifically concerning the wastage of blood and access to blood products. Like Busby (2010), this data analysis shows that the expectations held by individuals consenting to donation appeared to be optimistic compared to the accounts of the realities of donated blood use. The pet owners also showed high levels of trust in the blood bank, confirming the work of Lipworth *et al.* (2011), and so they appeared to feel little need to question their own expectations. Whilst it was suggested above that uninformed consent might be justified where the individual has voluntarily chosen to focus on information most relevant to their decision, this argument, of course, rests on the assumption that the chosen information, or expectation, is in fact correct. In the case of the animal owners who held clear expectations that the blood would not be wasted or could be accessed by all animals who needed blood transfusions it appears that their expectations might not be correct. The clear owner expectations may be argued to create an obligation for the animal blood banks, the veterinary profession and regulators to either alter their practices to fit more closely with animal owners' expectations or to provide accurate and specific information (Shaz *et al.*, 2009) which presents a more realistic picture on which the animal owners can base their decisions and thereby provide valid consent.

This data analysis may well be able to inform the specific information which should be provided by the veterinary community since the pet owners gave clear accounts of the information which they considered relevant to their decisions. Whilst owners may still be required to consider the less interesting technical information for the reasons described above, what they really wanted to know (and appear currently to assume) was that the blood was benefiting other animals. The need for greater focus on such donation specific information is therefore considered in the ethical framework and regulatory

recommendations (Chapter 7). The data analysis in the next chapter specifically addresses the question of 'benefit' in canine blood donation and so allows a fuller discussion on this point, including the suggestion that actual transfusion outcomes might be different to or even conflict with those anticipated by the donor owners.

In light of similar concerns regarding expectation and trust in human bio banking, Lipworth *et al.* (2011) state that '*many authors saw the need for at least some external independent oversight of bio banking organisations (including lay representation despite the difficulties inherent in such inclusiveness), and strong legislation that is responsive to the findings of public consultations'* (Lipworth *et al.*, 2011:p.804). Because this data analysis points to very similar issues surrounding expectation and trust in canine blood banking, it may also be the case that pet owner involvement in the oversight of animal blood banks might allow policies and operating procedures (including consent processes) to be better informed by the parties who are making donation decisions for their animals. Since public trust is clearly critical in maintaining the operation of the canine blood bank, the identification of unrealistic expectations from animal owners should serve as sufficient grounds for the blood banks to develop the role of pet owners in broader operational decision making.

The data analysis has also highlighted some of the factors which might be involved in generating or perpetuating the positive misunderstandings that the animal owners appear to hold. Firstly the phrases used by the blood bank when promoting their work to potential donor owners such as '*every drop matters'* and *'each donation saves up to four lives'* (PBB, 2017) appeared to be translated by some owners into a literal measure of the value of donated canine blood. These exact phrases appeared in some owner's accounts, not within the context of information provided by the blood bank but as a representation of the owner's own personal views. Existing literature identifies a similar tendency for unrealistic public expectations in the bio banking context (Petersen, 2009) and highlights the role that emotive

language which is used to promote donation might play (Tutton, 2004). It may be suggested that this finding highlights a need to consider carefully how the animal blood banks might be able to help reverse the trend towards optimistic thinking which the owners displayed by reviewing the tone with which they market themselves to animal owners.

The theme of human-animal comparisons represents a particularly critical finding in this data analysis; specifically the degree to which comparisons between human and animal blood systems influenced the animal owners' decision making. This question is a particular feature of animal blood donation and as such has not previously been addressed in sociological literature. In some owner's accounts the justification for blood donation is suggested to be the same for humans and animals. This point is critical because it contrasts with the main conclusions of the ethical analysis whereby the justifications for human living donation cannot be directly applied to living animal donations. This empirical theme therefore raises the ethical concern that animal owners may not justify living animal donation adequately. On a practical level the pet owners' tendency to liken animal and human blood donation may well be a major factor in explaining their limited understanding of animal blood systems and the unrealistic expectations which they appear to hold. What is of particular significance here is the apparent lack of recognition of the contrast between the publicly owned human National Blood Service and the private nature of veterinary treatments, including blood transfusions. This has important implications for donor owners who did not provide any indication that they had thought about the realities of cost in the use of animal blood products. In fact some owners claimed that they would like access to blood products to remain independent from pet insurance. The impression generated in the veterinary professionals' accounts is, of course, that blood products and the costs of transfusion must be paid for by the animal's owner or insurance company, with blood products costing up to £400 per unit (PBB, 2014b). Indeed, according to press reports, whole groups of animals such as those treated by the animal charity PDSA,

are not treated using banked blood products but are reliant upon the finding of a suitable donor by the veterinary clinic (PDSA, 2011).

Equality and fairness in the allocation of banked blood products for human patients is a central ethical requirement with blood products being considered a national resource by the World Health Organisation (WHO, 2013). How the animal blood banks and the veterinary regulators choose to improve understanding of their arrangements for access to animal blood products for the donor owners will need to be carefully thought through if public support is to be maintained. The broader ethical implications of the factual inconsistencies caused by extrapolation of human medical knowledge to animals extend far beyond the quality of consent in animal blood donation. This is discussed as a major outcome of the thesis in the concluding chapter.

Finally, some of the broader implications of the data analysis in this chapter are considered. Much of the discussion surrounding owners' knowledge, misunderstanding, optimism and expectations, along with the negative consequences of blood product costs and wastage, could logically correspond to the physical and cognitive distance which blood banking creates between the blood donation and its eventual use. In veterinary practice, unlike human medicine, it is still very common for an animal and their owner to rely on their close relationship with one vet or one veterinary practice when dealing with a wide range of veterinary decision making. The lack of such close interpersonal relationships on decision making in animal blood banking and blood use is exemplified in the accounts of the donor owners and veterinary professionals through the way that blood for transfusion was described variously as 'lifesaving', 'inaccessible' or 'normal'. In this way it seems that the blood may be viewed with increasing detachment as it travels away from the source and becomes commodified by frequent users. That blood in the clinical context may be viewed differently by different stakeholders has previously been discussed by sociologists (Pfeffer and Laws, 2006), where the healthcare professional's confidence in their own understanding of blood (Lynch, 2002) has been contrasted with more personal, embodied accounts (Laws, 1990).

In a similar vein, most donor owners had no reference point within their own experiences upon which to base their expectations for the outcomes of blood product use. Rather than referring to blood transfusions occurring within the practice which they donated the blood, their imaginations were given free rein. By contrast, some administering vets viewed the blood products in a way that appeared inconsistent with their perceived value at donation. In addition to creating problems for the provision of informed consent, the unusual nature of animal blood banking procedures introduces further ethical risks in that no one individual appeared to hold a complete understanding of the journey the blood had made, an argument which has previously been made in the human medical context (Pfeffer and Laws, 2006). This meant that responsibility roles in this ethically charged area appeared unclear. This unusual *veterinary* situation elevates the importance of transparency and trust between the donor owners, veterinary professionals and blood banks. Furthermore, it indicates that the blood bank has a central ethical role; rather than being an impartial mediator through which the animal owner and veterinary professional achieve the 'transaction' of blood donation, it must shoulder the burden of responsibility for ensuring that the views and expectations of all involved parties are synchronised.

In summary, like human blood donors (Alaishuski *et al.*, 2008, Pfeffer and Laws, 2006, Busby, 2010), animal owners providing consent for the donation of their dog's blood appeared to lack a full understanding of the processes following donation. However, in line with previous sociological work on choice in donation decision making (Valapour *et al*. 2011; Burnell *et al.*, 2015) the owners suggested that they voluntarily limited their understanding and made choices based solely on the knowledge that they were benefiting other animals. The data analysis extends the role of expectation, optimism and trust from human donation (Lipworth *et al.,* 2011) to animal blood donation. This was evidenced by owners' clear expectations regarding the use of the donated blood which did not appear entirely consistent with some of the accounts of the veterinary professionals using blood products. The data

analysis also highlights the significance of human-animal comparisons in generating and perpetuating some of the owners' expectations.

This empirical analysis informs and contextualises the ethical analysis in several ways; highlighting the need for specific information provision for consent to canine blood donation, a transparency rationale for public involvement in blood bank operational decision making and the significant responsibility role of the blood bank in maintaining trust between the public and the veterinary profession in this context.

6. AN EMPIRICAL ANALYSIS OF CANINE BLOOD DONATION: OWNER MOTIVATIONS, HUMAN BENEFITS AND DONOR BEST INTERESTS

6.1 Introduction

Sociological analysis of motivation and benefit in canine blood donation is novel; however limited existing work offers a glimpse into the complexity of this area:

> (Donor) guardians frequently were current or former blood donors themselves, and their stated reasons for bringing their dogs to donate were similar to their own reasons for donating. Some donor families had pets (or pets of relatives or friends) who had required transfusions in the past … Others cited an intrinsic reward from the act of donation or general concern for the community (DeLuca *et al.*, 2006:p. 137).

In their work, DeLuca et al (2006) anecdotally record links between the motivations for human and animal blood donation and the potential for both human and animal rewards. These themes are separated and explored in depth through sociological empirical analysis in this chapter. The analysis is focused on informing the normative discussion of a 'best interests' justification for canine blood donation.

It was earlier argued in Chapter 4 that a best interest justification might be applied to the donation of canine blood when the donor can expect a benefit from using banked blood products in the future if necessary. The following section reviews empirical studies from medical sociology to show that such arguments are indeed made by human blood and tissue donors and that donors are motivated by concepts of mutuality or even self- interest rather than pure altruism (Busby, 2004; Farrugia *et al*., 2010; Bednall *et al*., 2013; Moorlock *et al*., 2014; Burnell *et al*., 2015; Shaw, 2015; Locock and Boylan, 2016). It is argued that potential physical benefits and actual psychological benefits from donation have been shown to motivate human donors of blood and tissue. The chapter then extends the existing knowledge base through exploring whether such benefits also motivate the owners of canine blood

donors. Some aspects of this analysis are published by Ashall and Hobson-West (2017). The concluding section considers what the empirical findings mean for an ethical justification of canine blood banking which is based on donor best interests.

6.2 Motivation in human blood and tissue donation

The National Blood service claims that 25% of us will need a blood transfusion at some point in our lives and yet just 3% of the adult population in the UK are donors (NBS, 2016). The constant need to increase the donor pool has made understanding the reasons why people might choose to donate or not to donate blood an important area for study. Titmuss's book 'The Gift Relationship' (1970) is regarded as a seminal work which explores the social organisation of health services by citing policy statistics and empirical data relating to the donation of blood in different countries. Titmuss has been credited with highlighting the significance of altruism as a motivation for blood donation and consequently framing the donation experience as a 'gift' (Titmuss, 1970). His work aimed to influence the organisation of blood collection programmes and he promoted institutional altruism; that is to say systems which depend on voluntary giving, his central argument being that altruism is both morally sound and economically efficient. Titmuss's work has become crystallised over time and has heavily influenced both academic and policy considerations of motivation in blood donors. In more recent years, however, Titmussian 'gift' arguments have been increasingly criticised by social scientists who use empirical studies to identify a more complex set of motivations in donors, such as self-interest or even guilt. Consequently, even where donors are not financially rewarded, a concept of 'mutuality' (Busby, 2004), which recognises that donors as well as recipients stand to benefit, is being increasingly recognised.

Oakley and Ashton (1997) sum up some of this criticism as indicating that Titmuss was *'misunderstanding the anthropological literature in casting the giving as somehow essentially virtuous*' (Oakley and Ashton., 1997:p.8). More recently, Busby (2004) explored the practical changes which have occurred

since the creation of the first national blood bank in a time of post-war solidarity. Busby uses interview data from National Blood Service donors to reinforce her argument that mutuality, not one-directional altruism, was implied by the blood donors themselves. Furthermore, Busby claims that Titmuss's original work identified more with the theme of mutuality than is generally credited (Busby, 2004).

Other work confirms that blood donor motivations go beyond altruism. After reviewing the literature, Farrurgia *et al.* (2010) point to upstream and downstream reciprocity, where the donation represented gratitude for blood received by loved ones, or was intended to ensure an adequate supply for the donor's future use. Other forms of intrinsic motivation were also reported such as an enhanced feeling of self-esteem (Farrugia *et al.*, 2010). Similarly, findings of a systematic review (Bednall *et al.*, 2013) point to a multitude of factors, including feelings of satisfaction and a desire to avoid regret. Furthermore, this review suggested that whilst the first blood donation offers relief from an obligation to donate, this motivator is less reported by frequent donors (Bednall *et al.*, 2013). This empirical data analysis indicates that when a perceived obligation to donate (human) blood is not satisfied, associated feelings of guilt or regret can reportedly influence the decision to offer a pet as a blood donor.

Recent research on related topics confirms the need to go beyond assumptions of altruism, including work on organ donation (Moorlock *et al.*, 2014; Burnell *et al.*, 2015; Shaw, 2015), bone marrow donation (Garcia *et al.*, 2013) and the donation of tissues to biobanks (Locock and Boylan, 2016) to the point where some have concluded that the term 'gift' offers little utility in representing donors views and its use should be discouraged (Locock and Boylan, 2016).

This chapter considers the extent to which these findings have resonance in the case of animal blood donation. However, there is a significant additional layer of complexity in the veterinary context; namely, that in the case of

animal blood donation, the individual making the donation decision is not the same individual who will actually undergo the procedure. How does medical sociology understand the nature of benefits and motivation in third party donation decisions?

Human blood donations are not taken without individual consent and living donations of other tissues which are consented to by a third party are currently uncommon in human medicine (although, as previously discussed, some argue that it may be justifiable to use children or 'incompetents' as organ donors as it may be in their best interests to donate (Wilkinson, 2011; Van-Assche *et al.* 2014)). However, one potentially comparable existing area is bone marrow donation by children, generally for the treatment of family members. In line with this chapter's focus on best interests justification, it has been argued that taking donations from humans who cannot legally consent is only justifiable if the donor themselves benefit (Spital, 2004). So, does sociological work in this area suggest that helping a family member will always constitute a benefit for the donor? Even leaving aside the physical risks of donation, this is far from straightforward. For example, donation may carry social risks for the child, if the family focus were to shift significantly from the donor to the recipient, or the donor might feel personally responsible if the donation did not go well (Bendorf and Kerridge, 2011). Whilst donation in this context could strengthen family ties (an issue which is returned to later) child donors might experience pressure from family or wider society to donate (Garcia *et al.*, 2013).

Finally, the language of non-consenting donors 'benefitting' or reference to prioritising the interests of 'the donor' (Wilkinson, 2015) is considered problematic by those who argue that this is to take an individualistic approach to donation ethics. For example, in discussing the topic of so-called 'saviour siblings', where children are created with compatible tissue for donation to sick family members, Taylor-Sands (2015) argues that a more relational approach is needed, where the interests of a family unit as a whole are considered (Taylor-Sands, 2015). This shift towards the family as a unit of

analysis has important implications for empirical work on donation and is returned to in the conclusion of this chapter.

In terms of additional relevant literature, the relationship between the donor and the third party providing consent is an interspecies relationship in the veterinary context, meaning that sociological understandings of human-animal relationships which connect animal ownership to ideas of 'family' are also potentially significant. As was discussed in the thesis introduction, sociology has traditionally been preoccupied by human-human relationships but post-human theorists have attempted to deconstruct traditional nature-culture boundaries (Derrida, 2008). Post-human theory has been met with disagreement concerning how interspecies relationships might play out in our everyday lives (Wolfe, 2003; Haraway, 2003; Haraway, 2007). For example Haraway suggests that hybrid human-animals (the companion species) *arise* from the complete connection between human and non-human animals; the two parts *become with* one another (Haraway, 2007). However, Latimer (2013) argues instead for a '*regard for division (and difference) as well as connection'* (Latimer, 2013:p.93) between human and non-human animals, suggesting instead humans *being alongside* non-human animals.

Whilst post-human theories might be applied to many different human-animal relationships, the observed position of pets on the boundary between 'human' and 'animal', has led to pet ownership being identified as a particularly useful place to examine theoretical attempts to deconstruct the nature/culture boundaries and '*understand the ways in which distinctions between the animal and the human are mobilized, disrupted, crossed and re-crossed*' (Fox, 2006: p.528). Fox describes how pet owners understand their pets as both 'human' and 'animal' by virtue of the similarities and differences they perceive between their pets and themselves. That human-pet relationships approximate, but are distinct from, understandings of a human 'family' where close emotional bonds between owners and their pets exist alongside an appreciation of their 'non-human' qualities, is argued by Charles (2015) who frames the interspecies familial relationship as 'kinship'. However,

Charles (2015) argues that '*Rather than witnessing a new phenomenon of post-human families, multi-species households have been with us for a considerable length of time but have been effectively hidden from sociology by the so-called species barrier'* (Charles, 2015:p.715).

It is important to point out that similar social relationships also exist in some human medical fields, for example in paediatrics (Dimond, 2014). In the paediatric case, a triadic relationship also exists between parent, child and healthcare professional, and some authors have called for more research on this dynamic (Gabe *et al.*, 2004). If Charles's notion of interspecies 'families' is accepted, then data such as that analysed here may further illuminate professional and familial tensions which connect both veterinary and human donation practices.

In summary, sociological understanding of motivation in human living donation has challenged traditional notions of altruism and illuminated the role of donor benefit and the concept of mutuality. In third party donation decision making, the social context is poorly understood but social risks of paediatric donation have been identified. The complex social context of donation decision making has resulted in some ethicists challenging traditional individualistic normative approaches. Furthermore, the specific context of this study brings together sociological understanding of donation with sociological understanding of human-animal relationships, meaning theories such as human-animal 'kinship' may link both the familial and professional relationships which exist in the human and animal donation contexts.

The next section moves on to consider how the novel data analysis might extend or illuminate some of these themes in the context of companion animal blood donation.

6.3 Data analysis

This section explores three analytic themes. The first theme shows how arguments of potential physical benefit for the donor do appear to be made

by the pet dog owners. However, it is also shown that material benefits for the canine donor which are not directly related to the banking of blood also appear to be important in the accounts of kennelled blood donors. Secondly, the accounts of veterinary professionals using banked blood products are analysed to show how the transfusion of canine blood might not always result in the type of positive outcome that is imagined by the blood donor owners. Furthermore, the potential role of human benefit in some transfusion decision making is highlighted. Finally, the analysis further develops the notion of humans rather than animals benefiting from canine blood banking through introducing the emergent theme of 'proxy' blood donation. Here a novel psychological benefit is identified which exists for some human owners and which might even conflict with the interests of the canine blood donor.

6.3.1 Benefits for animals in canine blood donation

This section explores two different accounts of 'benefit' for animal blood donors described by the pet blood donor owners and kennelled blood donor owners. The first describes the benefit of donors potentially accessing blood products in the future and the second an immediate physical benefit in the form of free healthcare and other 'in kind' rewards.

Donor access to blood products

As was discussed in the previous chapter, the primary stated aim in canine blood donation was to save canine lives. The importance of this was heavily emphasised, with some owners being explicit about the lengths they went to in order achieve their aim, such as travelling long distances or taking time off work. In some owner accounts the donation of both human and animal blood was constructed very clearly as a 'gift':

> *I give blood … if you've got something someone else can have you can give it (0wner 6).*

> *If people are going to donate [money] to animal charities and everything else why would they not…why would they not do it [donate canine blood]? (0wner 8).*

However the owner accounts also clearly extended beyond ideas of pure altruism. The opportunity to receive a blood transfusion was constructed by the dog owners as a potential benefit for all dogs and this included, quite visibly, the donor:

> *It's going to benefit other dogs and maybe someday it will benefit him as well…in the future [if] he needs a blood transfusion he might, you know he might get his own back, you never know. If anything happened to him I would be absolutely devastated, you know if a blood transfusion could have saved his life and there wasn't any available (Owner 8).*

> *It was quite easy [decision] because you never, you know if he ever needed any, had an accident or whatever. Well as I say you never know if he needed blood (Owner 15).*

The suggestion that the donor animal might get his own blood back was unusual and most pet owners appreciated that other pet owners would need to be involved to ensure mutual benefits:

> *I thought it [the decision] was quite easy because I'd like to think that somebody else lets their dog give blood if my dogs would ever need blood (Owner 17).*

> *I keep thinking what would happen to him if he had a serious sort of 'dog versus car' and I would hope that somebody else would have given blood that he could use' (Owner 18).*

> *If one of my dogs needed blood hopefully there's somebody that's donated (Owner 14).*

In fact the similarity between assumed mutual benefits as a motivator in both human and canine blood donation was also appreciated by the pet owners:

> *We would be quite glad, if he was ill or had an accident and needed blood or blood products, we'd be quite happy to receive them, like*

most humans, so we thought we would see if he could do it or not (Owner 15).

This expectation of mutual benefits was a central theme in the pet owners' accounts, however, a different account of 'benefits' for donor animals emerged from the accounts of the kennelled blood donor owners.

Direct 'benefits' for kennelled blood donors

As retired racing greyhounds the kennelled dogs were all of a breed which several dog owners identified as desirable blood donors:

Their blood [greyhounds] is sought after (Owner 4).

They like greyhound blood because it's more oxygenated I believe (Owner 6).

Whilst the pet dog owners accounts focussed centrally on the benefits to other animals and the donor of access to blood products, an additional direct benefit to the kennelled animals in the form of free healthcare was very frequently used to justify these dogs' involvement:

Obviously the dogs get a check-up … and when things have been picked up [the blood bank] has run blood [tests] for us free of charge (Kennel Owner 1).

We've used the advice of the [blood bank] vet on site many a time which is handy for us because it costs us taking them to the vet (Kennel Owner 2).

They do get a health check of the dog, which you know they do look at that side as well and if they've got any blood related problems going on early in life it will pick up on that…we can give these dogs medications and get things sorted out at an earlier stage than what we would have done normally …they do get a free health check basically and the dogs are checked over by a qualified vet (Kennel Owner 3).

In each of these accounts the monetary saving gained by having additional health checks or blood tests provided by the blood bank is made explicit. In addition some kennel owners also identified a direct benefit for the donors in that their donor status was an indicator of their good temperament which might encourage someone to offer the animal a home:

> *I just find it's really good and beneficial from our aspect that all the dogs that give blood from here are fully health checked again…. [And] I think it's quite beneficial because it shows their temperament a lot more... You know being sort of relaxed (Kennel Owner 2).*

Such direct benefits for canine blood donors were not identified by the owners of pet dogs and therefore seem to represent a difference between the perceived needs of the kennelled donors and of those donors who were pets. One kennel owner described how his kennelled dogs donating blood is different for him from watching his own pets donate:

> *I think because they're my animals I just feel a bit more anxious. But they're all mine here really, they're all registered to me but he lives in the house, you know it's different; it's different for me (Kennel Owner 3).*

In some accounts the animal owners were candid about the difference in status of retired or rescued greyhounds and how that might raise questions over their use as blood donors:

> *I feel as though they're still giving, they gave all that racing, but they are still having something asked of them really in a way (Owner 4).*

For one kennel owner her assertion that she would not support organ donation from the greyhounds was rooted in her identification of them as disadvantaged dogs:

> *I don't have any problems with that [blood donation] But I would have problems with organ donation, I don't know that I could say I could*

agree because they're disadvantaged dogs to start with and then quietly signing away their body parts I think that there would probably be a lot of opposition to that (Kennel Owner 1).

That the dogs were previously used for sporting purposes led to concerns over the potential for further exploitative financial arrangements between the blood bank and the rescue kennel:

I think people who were against it to start with see that the dogs have already been used as a money making machine, then they're being used for some other game... They were saying 'do they pay you for it?' And I said 'no' but in return we get the dogs fully health checked… we were getting flea treatment, treats, food and that was important to me (Kennel Owner 2).

Interestingly here, the kennel owner again raises the benefits of free healthcare for the dogs while defending the lack of financial payment for the blood. This account explicitly states numerous important 'in kind' benefits which kennel owner accepts '*in return'* for the blood donations. However, the lack of actual financial reward was promoted as an ethically important arrangement:

But I did have some negativity to start with but very minor and when I kind of explained that this could help save another dog's life and that it really should be considered something good we are doing, not, you know because no money, no money is involved with it on our part, I think it kind of justified it more (Kennel owner 2).

Negative reactions to the concept of canine blood donation were much more visible in the accounts of the kennelled dog owners:

I took it to the committee and said we'd been approached [by the blood bank] and was everybody happy? And some people weren't but the majority were so we said yes (Kennel Owner 1).

> *A lot of people seem to think it's quite cruel…basically a lot of people think it's abusing the animals….they think it's wrong that you should be using animals for that purpose (Kennel Owner 2).*

These polarised views of the use of kennelled dogs as blood donors appeared to be closely associated with differing views on whether financial payment should or should not be made:

> *There's the odd one [person] that thinks we should get something in return […] because these are homeless dogs and we are a charity that perhaps we should get some sort of donation. And I have tried to explain that it doesn't really work like that (Kennel Owner 1).*

In summary, the kennel owners justified their dogs' involvement through direct clinical and other 'in kind' benefits as well as the previously encountered benefit of 'saving lives'. Negative reactions to the use of these dogs as blood donors appeared more visible and were focussed on their 'disadvantaged' status and uncertainty over the ideal financial arrangement between the blood bank and the rescue kennel.

6.3.2 Benefits for humans in canine blood donation

This section explores how the donation of blood and the use of canine blood products are constructed as beneficial for humans as well as animals.

The human-animal bond

In addition to helping dogs directly, the animal owners also constructed donation as indirectly helping animal owners. Canine blood donations were presented as important, not just because they might save a canine life, but because this positive outcome would also have the effect of protecting a human–animal bond (defined by the American Veterinary Medical Association as '*a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors that are essential to the health and well-being of both'* (AVMA, 2017)). By extending the idea of canine blood products saving the lives of both blood donors and other dogs, interviewees

were able to describe their desire to protect both an intense bond with their own dog, and also the bonds between other dog owners and their pets:

> *I always think if he had an accident or something and he needed it [blood] and it wasn't there how devastating it would be (Owner 18).*

> *I feel as though I am doing something. Like I say it might be a child's dog or an old person's companion we might have saved' (Owner 4).*

In the second example, the owner was even able to identify the particular type of person (child or elder) who might benefit the most because of their strong bond with their pet. In this quotation we start to see the emergence of canine blood donation as conceived as a virtual transaction or exchange between two people, where the canine parties involved were not always the central characters in the narrative. This theme will be explored more fully later in this chapter.

In addition, whilst the donated blood was viewed as valuable in protecting human-animal bonds, the *act* of donation itself was also significant in strengthening or reinforcing the bond between the owner and 'donor' animal. For example, some owners reported a feeling of reward gained when the veterinary staff or their friends praised the dog for donating blood. This praise served to strengthen and confirm their own feelings about their pet:

> *It's nice to have other people appreciate that your dog is, your dog is fabulous, as great as you think he is (Owner 3).*

In other cases, where an owner admitted that their dog was not always well behaved, donating blood appeared to create an opportunity for their bond to be reinforced or protected through a positive experience:

> *It kind of proves to me that he's as good as I think he is no matter what he does (Owner 17).*

This construction of the donation experience as an event which strengthened the relationship between an owner and their pet was also presented in other

ways, such as an opportunity to focus on one dog where the owner had several pets:

> *It gives me time with him because we have other dogs so we come out together and it's something we do together (Owner 13).*

In this way the pet owners' accounts of intense human animal bonds highlighted the benefits for humans, as well as animals of both donating and receiving canine blood. Interestingly, much as the material benefits identified for kennelled donors were not discussed by pet owners, benefits associated with the human animal bond were also not addressed by the kennelled donor owners.

The next section further extends the idea of humans benefitting from the donation of canine blood.

'Doing good by proxy'

The owners of dogs donating blood frequently volunteered their own blood donor status; it has already been shown that owners who are blood donors used this fact to explain and justify their dog's involvement. What happened with equal frequency was that owners who were *not* blood donors themselves also used this to justify their attendance at the canine blood donation session:

> *I haven't actually done it which is why I wanted her to do it because I think it's important that you do something in this world (Owner 2).*

In this case, the dog's donation allowed the owner to fulfil her own need to 'do something' positive. It was earlier suggested that the practice of donating a pet's blood allows for a virtual 'connection' to be made between the owners of dogs donating and receiving blood. In some accounts this was made even clearer with the suggestion that even when an owner could not donate themselves, they were helping other humans through donating their pet's blood:

I just never got round to it really…So I feel a bit guilty about that. Yes I do … so perhaps I'm using these as a substitute, as at least they are helping some dogs if not people. Well in the long run it helps people doesn't it because people are so fond of their animals aren't they? (Owner 4)

In this account, the canine blood donation is clearly constructed as a transaction between two humans because it aims to protect the mutual bond they enjoy with their dogs. This account also very clearly expressed the guilt that people claim to feel because they do not donate blood themselves. This guilt appears to be at least partially appeased by the process of donating a pet's blood, and some owners were even more candid about their pet's role in making up for their own deficiencies as failed donors:

I can't give blood because I'm on blood pressure tablets...so I suppose it's a bit like doing good by proxy isn't it? You make the dogs do it instead (Owner 14).

Furthermore, when a dog did not successfully donate blood because it was unsuitable for clinical or behavioural reasons, the owners appeared to find it difficult to accept the loss of this opportunity:

I think it is disappointing because I've, because of Tess and because of losing Fred as well, because I've had some you know tragic circumstances in my life I would have liked to have had one [animal] that was able to help others…but maybe the next one (Owner 21).

In this case the owner had built up some considerable pressure upon herself and her dog because she felt she needed to 'repay' the pet owning community for help she had been given when her previous pets were ill. These narratives were commonly expressed by participants, where canine blood donation functioned as an opportunity for the owner to 'repay' acts of kindness, either within the context of pet ownership or within human society and medicine at large. The discussion section explores what these human

benefits of canine blood donation might mean for an ethical justification of canine blood banking which is based on the donor's best interests.

In summary the human owners of canine blood donors report benefits to humans relating to the strengthening and maintenance of the human-animal bond. Furthermore, some owners identify psychological benefits for themselves associated with 'doing something' positive through donating their animal's blood, this benefit being particularly desired by owners who feel guilt or obligation associated with their own blood donor status. In line with the asymmetry which was pointed out in the previous section, these human benefits were not described by the owners of kennelled blood donors.

6.3.3 Canine blood transfusion: recipient 'benefit'

The final analytic theme develops the construction of canine blood donation as beneficial for recipients by considering relevant aspects of the accounts of veterinary professionals detailing their use of blood products. The analysis is focused on identifying contrasts with the expected benefits constructed by pet donor owners.

In the interview data multiple benefits of banking canine blood are identified by veterinary professionals such as increased transfusions conducted, better donor welfare, access to screened and typed blood products and the potential to treat a larger number of dogs.

> *We can see the benefits for the owners of the pets that need the [transfusions] and some practices never did do blood transfusions … because it was either too complicated to do or they weren't comfortable doing it…so it offers it to a whole new group of pets out there. […] I'd equally heard of other practices where, sort of, the boss's dog got used probably more than it should be and yeah nothing was kind of set out clearly as to the way things should be done. And obviously with the screening side of things having a formal pet blood bank has all sorts of advantages. And obviously it gets split doesn't it*

so you're actually helping potentially greater numbers of pets as well. So yes I can see lots of benefits (Veterinary Professional 1).

This more detailed assessment of the benefits of banking blood is dramatically different from the animal owners' more limited accounts of 'saving lives' and shows that the banking of canine blood may be beneficial in ways which were not visible in the accounts of animal owners. However, the idealised benefit of 'saving lives' imagined by the blood donor owners also appeared to be challenged by some aspects of the veterinary professionals' accounts of the realities of blood product use, specifically their concerns regarding the misuse of blood and the overtreatment of animals. These inductive themes within the data analysis are explored below.

Misuse

The increased availability of blood in conjunction with a lack of familiarity with blood transfusions raised the question of whether blood may be misused by the veterinary profession; concerns were raised about the wastage of blood, potentially contributing to blood shortages.

If the surgeon knows they can't get spare blood they'd be a tad more careful[..] because there's two [uses] there that we are talking [about], one is for disease purposes and the other one just for, well that doesn't really happen in veterinary medicine as far as I'm aware but using it because it's available (Veterinary Professional 2).

In this quote the theoretical suggestion that banked blood might be used 'because it's available' connects with the donor owner's concern raised in the previous chapter that donated blood should not be used '*for fun – but for things that really need it*' (Owner 17). Again, in the veterinary professionals' accounts, access to and payment for blood are presented as potentially more limiting to blood product use than the degree of benefit which might be expected:

Sometimes you even say 'I don't really know if it's going to be of benefit or not', but I think if they've got it [blood] there and the patient needs it and the owners can afford it they would go ahead with it [transfusion] (Veterinary Professional 3).

Indeed the vets in referral practice were keen to offer the perspective that some non-specialists might be using blood products without an adequate understanding of transfusion medicine:

We do get practices phoning us looking for blood but it's, I think because they don't use it often they don't really know what to do with it; quite often I take phone calls and people are like 'oh, what kind of blood can I give to this dog? (Veterinary Professional 3).

Such occurrences were sometimes constructed specifically as a misuse of blood:

I think … [as] with everything in veterinary medicine I think there's a misuse of blood. I strongly feel that …I mean working as a specialist you're frequently called by a referring vet about suggestions [for] things to do. And very frequently you get [to see] things … maybe like [a] Rottweiler that was haemorrhaging, asking for one unit of blood and you're going to need more than one and you need to know why it's haemorrhaging. […] If you give the blood the dog is going to die anyway, you don't know why so you need to refer. And this was like the tip of the iceberg; I think a lot of people don't ask so I just give [them] the blood. So I have the feeling, like a lot of things it's misused because it's available (Veterinary Professional 4).

In this quote the increased availability of blood and a lack of knowledge are again suggested to promote the misuse of blood products. This veterinary professional offers the perspective that 'a lot of things' are misused in veterinary practice, but in the case of misuse of a biological product such

practices appear to generate specific concern. That inappropriate use of blood might even cause shortages was raised by one professional:

> *I think sort of the general awareness amongst the GP population is increasing. I think because it is still a relatively limited resource I do worry that as well as increasing awareness of its application in practice I think we also need to step up their ability as well because certainly there are times when it's very difficult to get hold of [blood] …and that's an issue. Sometimes it's quite difficult to get (Veterinary Professional 5).*

What is particularly interesting about the possibility that blood misuse might cause shortages at the blood bank is that it adds a different dimension to the 'high demand' reported by the blood donor owners upon which they based their assumptions that they are saving multiple lives.

In summary the accounts of the veterinary professionals raise consistent concerns over the misuse of blood products. It is suggested that increased availability of blood products and a lack of knowledge of transfusion medicine might fuel this trend and even contribute to a lack of availability for those animals in genuine need. The next section describes the veterinary professionals' thoughts on the role of animal owners in the use of blood products. As is later discussed in the final thesis chapter, whilst outside the scope of this project, this specific area would almost certainly warrant additional empirical investigation through interviews with animal owners who requested or refused blood transfusion for their pets.

Overtreatment/harm

Several veterinary professionals described how, in their view, some animal owners consider blood transfusion a step beyond 'usual' treatment or as an indicator of poor prognosis for their animal:

> *Sometimes people don't want to do that [transfusion] for their own ethical reasons.[…] I think a lot of people just view it as a step too far, I*

think the talk of it scares them…it makes them realise how poorly their pet is sometimes. It can be a good thing because it makes them realise that it might not come out the other side and it makes them make the decision perhaps at what would be the right time and sometimes it's euthanasia that follows that conversation (Veterinary Professional 1).

They can be, not negative about the administration of the blood [transfusion] but negative about the need for it, simply because it infers that the case isn't going so well (Veterinary Professional 5).

Sometimes the owners do decide to put to sleep rather than treating if it's maybe not a really good prognosis, they might say 'well I'm not going to risk putting the dog through X, Y and Z and then having to make this decision next week'. So sometimes they do just call it a day before [transfusion] (Veterinary Professional 3).

In the veterinary professionals' accounts, much as the donor owners had expected the blood product use to be 'lifesaving', it appeared that some owners of sick pets also had optimistic expectations concerning the transfusion of blood:

I feel some owners have a misconception 'you have to give blood to save my [pet]'. I think this is part, I'm not sure if it is genuine or possibly [due to] the referring vets. And I have to explain to people... It's not necessarily the case [that] if you don't treat them their life is over. […] So sometimes people ask me 'oh please give more blood' and I explain it's not necessarily useful (Veterinary Professional 4).

The role of the animal's owner in the administration of blood products was also apparent in the veterinary professionals' accounts of transfusions which did not ultimately save an animal's life:

We could view it [blood transfusion] as beneficial even if the ultimate outcome perhaps isn't what we would want or what the owner would want because I think it often can buy a little bit more time for people

to come to terms with things…we've given the owner time to think about things and make the decisions (Veterinary Professional 1).

I mean like the one we had last week that got put to sleep, she was on blood to keep her, keep her alive until the owners got here because the owner wanted to see her. So that transfusion was to try to keep her going until the owners arrived which was only going to be about half an hour away but I mean that was, I mean the dog was comfortable, it was to keep her alive until the owners got here to say goodbye to her (Veterinary Professional 3).

In this way, it appears that the human owner can benefit from the transfusion of canine blood, even when the animal does not ultimately benefit. In a similar way to the data analysis presented above, the human-animal bond became a central feature of the veterinary professionals' accounts of the benefits of blood product use and explains how the human owners can benefit greatly from even a short term extension of the animal's life or the chance to say goodbye to their pet. However, this human 'benefit' of canine blood transfusion also raised questions over whether this was a legitimate use of the blood products:

[…] In some ways I do agree that it was nice for the owners to be there at the end… but it can go a bit too far in that respect and sometimes the dogs are just better off [euthanized], like they don't even know where they are. […] I think that the blood would have been better going to a patient that would have had a good prognosis (Veterinary Professional 3).

Much as the referral vets who used blood products identified their clients as different due to their ability to pay for advanced treatments, they also identified a particularly intense human-animal bond in some clients which they felt had a part to play in their animal's end of life treatment decisions:

A referral is already a kind of selected [type] of client (Veterinary Professional 4).

Given that, I suppose, if you accept that we've already selected, that sort of the more bonded owners anyway, because there are definitely subsets within that. Of the sort of bonded and realistic and the ... less traditional human pet type of bond. More perhaps a human surrogate child, or surrogate family member bond for various reasons. […] Certainly the sort of uber- bonded owners can have more problems when it comes to letting go (Veterinary Professional 5).

In fact this idea of owners having difficulty 'letting go' of their animals was sometimes presented even more clearly as an animal welfare concern:

I remember a patient we had in that was in a terrible state and the owners just wouldn't give up and I think they mortgaged their house and everything to pay for the treatment. But…it ended up getting put to sleep about a week later, but it was in terrible state and they just wouldn't say no (Veterinary Professional 3).

That donated blood or other tissues could fuel the overtreatment of animals and potentially result in prolonging suffering rather than benefitting the recipient appears to contrast markedly with the expectations of the donor owners. Indeed this risk was specifically raised by some donor owners:

Whilst I have no problem with him giving blood to help other dogs I still get very worried about some of the things that you hear, particularly from the States, about people treating animals for. One of the things that you have with an animal is that you can give them dignity in death (Owner 20).

There are certain situations where I wouldn't want to keep a dog alive […] but I still think there are a whole lot of conditions where it [blood transfusion] is helpful and if a dog can go on to have a good quality of life after treatment then that's fantastic. I do slightly worry sometimes

that we don't know when to stop. […] I have a problem with keeping animals alive for the sake of the owner (Owner 13).

Such clear contrasts between the accounts of the donor owners and administering veterinary professionals again have implications for the quality of donor owner consent but are also significant for donor best interests arguments where the animal benefits of receiving donated blood may be critical.

In summary, the professionals' accounts of canine blood transfusion illuminate an uneasy situation for vets and owners often centred on the complexities of end of life decision making. The ideal of blood products saving lives is challenged in several ways by accounts of humans benefitting from non-life saving canine blood transfusion and the claim that blood transfusion might even prolong suffering in some instances.

6.4 Summary of data analysis

The first analytic theme explored accounts of the benefits for donor animals of donating to the blood bank. The belief that the donor animal might one day benefit from using the blood bank was made very clear by the pet dog owners. However, the kennelled donor owners were also strongly motivated by free health checks, food and flea treatments provided by the blood bank, although they promoted the concept of non-payment for blood. This difference in accounts of donor benefit was accompanied by descriptions of the different status of retired greyhounds where these dogs were identified as disadvantaged and at risk of exploitation. The kennel owner accounts described negativity associated with the use of retired greyhounds as blood donors, often concerning the potential for inappropriate financial arrangements between the blood bank and the rescue kennels.

The second analytic theme identified benefits for humans as well as animals in canine blood banking. It was suggested that pet owners conceptualised the ideal of saving canine lives as protecting the bond between an owner and

their pet; creating potential future emotional benefits for other pet owners and themselves. This benefit allowed donor owners to construct canine blood donation as a transaction between two people. The idea of human benefits was taken even further by some owners who suggested that canine blood donation relieved their guilt or obligation associated with not having donated blood themselves.

Finally some constructions of the benefits of canine blood transfusion for the recipients were considered. Whilst the veterinary professionals did identify multiple benefits to canine blood banking, they also highlighted some concerns. The increased availability of canine blood and a lack of experience in transfusion medicine were suggested to potentially create a risk of misuse and wastage of blood products. Furthermore, canine blood transfusion and euthanasia appeared to be closely connected in the professionals' accounts such that transfusion was sometimes suggested to give animal owners time to accept their situation or say goodbye to their pet. That humans rather than animals benefit from such transfusions connected with the concerns of veterinary professionals and pet owners over the risk that blood transfusions might paradoxically result in prolonged suffering rather than benefitting the recipient.

6.5 Discussion and conclusions

The first analytic theme explored the possible 'benefits' to donor animals of donating to the blood bank. The owners' motivations for canine blood donation show a close intertwining of benefits for other animals, with the anticipation of a potential for personal return. Returning to the literature on human blood donations, we can see some striking parallels, in that altruism or the giving of a 'gift' (Titmuss, 1970) appears to feature alongside self-interested motivations (Farrugia *et al.*, 2010, Bednall *et al.*, 2013). Furthermore, the overall impression of pet owners wanting to help each other fits closely with the concept of 'mutuality' as proposed by Busby (2004). The data analysis appears to confirm previous sociological findings on human

blood donation in terms of what motivates the individual making the donation decision. The finding that donor owners are motivated by a potential need to use the blood bank in future has ethical implications for the banking of canine blood because, as was highlighted in the previous chapter, it informs discussion over the quality of their consent. This additional expectation adds to the burden of obligation the blood banks hold and, in light of the previous discussions concerning cost and access to blood products, it should be ensured that the future needs of donors are properly considered and communicated. The concept of 'mutuality' has additional implications in that it may represent a valid justification for canine blood donation according to the best interests of the donor, where donors can be shown to benefit from being able to use the blood bank should they need to do so.

The second 'benefit' which was visible in the kennelled donor owners' accounts only was that of free healthcare, food and flea treatments for donor dogs. In the previous chapters it was argued that donation practices which depend upon a societal inequality between the donor and recipient are not justifiable because they do not respect the equal bodily interests of all animals and merely promote the interests of their owners. Therefore, it was argued that benefits which only exist for disadvantaged animals might be reframed as wider harms of such donation practices. This argument would suggest that free healthcare does not represent a *benefit* of donation but a wider harm because it indicates reliance on an inequality between societal treatment of the donating animal and the potential transfusion recipient (who must by definition have adequate access to healthcare). That the pet dog owners did not describe health checks or food as a significant benefit of blood donation might potentially further underline the different status of the kennelled animals who were openly presented as 'disadvantaged' and at increased risk of exploitation by the interviewees. Adequate healthcare and food should be considered something which the donor would already be entitled to if the treatment of all dogs was fair and equal and so should not be

used to encourage donation. Indeed this precise situation is expressly identified as a concern for human donors in the interests of preventing the exploitation of vulnerable individuals. The WHO Guiding Principles state: '*Incentives that encompass essential items which donors would otherwise be unable to afford, such as medical care or health insurance coverage, raise concerns'* (WHO, 2010: Principle 5)

The cost of veterinary treatment is also, interestingly, a unifying theme in the accounts of the pet donor owners and kennelled donor owners. For pet donors the benefits of access to blood may be (unknowingly) limited by the cost of blood transfusion and the same is likely to be the case for kennelled donors although this potential benefit was not visibly considered by their owners. Furthermore, the cost of healthcare appeared to influence the owners of kennelled donors in that free health checks and blood tests were a significant motivator for them. An interesting policy conclusion may be that the free provision of health insurance to all blood donors would ensure that they are not prevented from accessing blood transfusions for financial reasons and may also address to some degree any healthcare inequality which might promote the use of kennelled rescue animals as donors.

In the pet owner accounts the recurring theme of the human-animal bond was central to their donation decisions. The analysis frequently highlighted how blood donation is specifically constructed by pet owners as a family value, or, taking Charles's view (2015) as something that is done as part of interspecies 'kinship'. The intense bond between owners and their pets appears to connect the physical benefits for animals receiving blood transfusions with emotional benefits for their owners. In addition, some pet owners reported that experiencing canine blood donation strengthened their bond with their own dog in various ways. This finding was unexpected and using the *act* of donation as an opportunity to publicly present or *display* family or 'kinship' relationships does not appear to have been discussed in existing literature. However, in sociology more broadly, the concept of family 'display' is promoted and Finch asserts that in human families *'the diversity*

and fluidity of contemporary family relationships are core reasons why displaying families is necessary' and that *'relationships need to be displayed in order to have social reality'* (Finch, 2007:p.71-73). Finch (2007) also argues that empirical work is needed to investigate precisely how people convey family (p78). This work suggests that canine blood donation is one tool through which multispecies kinship is displayed in the health context. Furthermore, it creates an opportunity for sociologists of human donation to consider the relevance of 'display' in human donation decision making.

Whilst benefits associated with the human-animal bond might be argued to encompass both humans and animals, owners' accounts often described 'humans benefitting humans' through canine blood donation and so the role and purpose of the animals in such transactions appeared reduced. Furthermore, that benefit for humans alone might be created by both the donation and transfusion of canine blood not only raises ethical questions but represents a significant development in both sociological understanding of the human-animal bond and the sociology of donation. Throughout this chapter the potentially intense but fluid relationships between humans and their pets has been a recurring theme (Fox, 2006b; Charles, 2015; Latimer, 2013). In the veterinary donation context it appears the bond allows animal owners to connect with other animal owners, to personally benefit from saving canine lives and to experience emotional and psychological benefits from accompanying their pet to the blood collection clinic. The data analysis identifies a social context which is complicated not only by fluctuating human-animal relationships but by intertwining human-human relationships, both physical and virtual. This work adds to the limited sociological understanding of human-animal relationships in the health context (Ryan and Ziebland, 2015) by identifying a specific connection between human and animal health care decision making through accounts of companion animals as 'proxy donors' (Ashall and Hobson-West, 2017).

Medical sociology has shown how powerful the psychological benefits of blood donation are for human donors, (Farrurgia et al 2010, Bednall et al

2013) and a significant finding from this thesis, is that such psychological benefits also appear to be experienced by owners who are offering their pets as blood donors. The owner who is consenting to canine donation may be at least partly motivated by a psychological benefit for them, which appears sufficient to alleviate their own guilt and obligation and can even generate 'disappointment' if the animal does not donate successfully. DeLuca *et al.* (2006) anecdotally record dog owners' reluctance to accept that their pet is not suitable to donate; however, there has been no previous analysis of why this might be. The ethical implications in this context are that owners might not always be motivated by their animal's best interests when consenting to canine blood donation and this must be very carefully considered by blood banks and the veterinary profession. For canine blood donation specifically, which is here sometimes constructed as a transaction between two humans, the role of the veterinary surgeon in facilitating such procedures will need to be very carefully considered, particularly where the benefits to the animal parties are less clear. This discussion also connects with wider questions concerning the moral and societal role of veterinary professionals since it graphically illustrates how veterinary procedures can generate conflicts of interest between the animal 'patients' and their owners (Morgan, 2007; Fettman and Rollin, 2007; Main, 2006; Coffey, 2008; Yeates, 2009). As will be discussed in Chapter 8, this further novel finding also potentially has implications for the sociology of third party human donation decisions and the sociology of human health more widely.

Finally, the data analysis considered the question of 'benefit' in canine blood product use. The accounts of veterinary professionals identified several potential concerns which might limit the benefits achieved through the wastage or misuse of blood products. Furthermore, the risk that blood transfusion might even cause suffering through prolonging an animal's life was raised as a potential concern by both veterinary professionals and donor owners. The scale of benefits achieved by blood transfusion has ethical significance similar to that raised by the benefits of blood donation. Firstly the

quality of donor owner consent is again called to question if their clear expectations are not met or even worse their expressed fears concerning blood use should be realised. Secondly, because benefits for donor animals appear to be limited to the possibility that they might benefit from a blood transfusion one day, the benefits of transfusion *are* the benefits for the donor. This means that if canine blood transfusion is not overall beneficial for the recipients, the donations cannot be justified according to the donor's best interest. It is important to point out that this represents a different situation to human blood donations which, as Chapter 3 discussed in some depth, are justified according to donor informed consent (which encompasses psychological benefits for the donor) and are therefore not necessarily dependant on the recipient outcome for their justification. For canine blood banking this means that the identification, monitoring and transparent reporting of actual benefits to animals from blood transfusion, together with the distribution of such benefits is even more vital, as is an assessment of any barriers which prevent the maximisation of such benefits. It was earlier suggested that animal owners should be represented in policy decision making at an organisational level and this analysis indicates the need for 'benefit' in canine blood banking to be considered during any such review processes in equal measure to the consideration of potential donor harms.

The complex social dynamics of donation decisions in humans have resulted in criticisms of individual ethical approaches to donation decision making (Bailey et al, 2015). It must be accepted that the arguments for best interests justification made in Chapter 4 are based on the approach that Bailey et al (2015) reject, because they suggest that the interests of the donor animal exist separately from, and conflict with, the interests of other individuals within the social context. The identification of a particularly complex social environment in this ethical analysis brings veterinary best interest justification into the sphere of recent debate concerning the merits of individual or relational approaches to human donation ethics (Wilkinson, 2015; Taylor-Sands, 2015). However, because this is the first work of its kind, a vastly

improved understanding of the social context within which animal donation decisions are made will be necessary before relational approaches could attempt to challenge a best interests approach. Wilkinson's assertion that ethical objections to living paediatric donations which are made on the basis of limited sociological understanding might be accused of being *'precisely wrong rather than vaguely right'* (Wilkinson 2011:p.143) are very relevant in both the human and animal context. Therefore, further empirical work which increases understanding of the social context within which human and animal donation decisions are made is essential. This should then be continually evaluated for its ethical significance; ultimately best interest arguments for living donation may be successfully challenged and relational approaches justified on the basis of such empirical work.

In summary, this chapter has identified complex motivations for canine blood donation which encompass an expectation of rewards for the donor as well as other dogs, a strengthening of the human-animal bond and psychological benefits for the owner. The construction of these benefits illuminates the intensity of some human animal bonds but also an apparent hierarchy between humans and animals; pets and rescue dogs whereby the identified benefits for each do not appear equal, this creates several ethical questions in the living animal donation context. Similarly, accounts of the benefits of canine blood transfusion highlighted the risk that the benefits for some animal owners might outweigh those for the transfused animal.

This empirical analysis informs and contextualises the ethical analysis by highlighting further areas for improvement in the quality of owner consent. For the best interest justification of animal blood donation the analysis has also raised the critical contextual finding that animal owners should not be relied upon to always accurately perform this test due to their reported voluntary lack of understanding and the potential for conflicted interests raised by significant psychological benefits for themselves. The animal benefits of canine blood transfusion should also be considered critical to best interest justifications. However, identification of a particularly complex social

environment in canine blood donation also leaves best interest justifications open to challenge if the nature and significance of this social context can become better understood.

The next chapter moves on from the empirical analysis to create an ethical framework for living animal donation which is informed by the ethical and empirical findings. The implications of the proposed framework for UK regulation are then considered.

7. AN ETHICAL FRAMEWORK FOR ANIMAL DONATION AND UK REGULATORY IMPLICATIONS FOR CANINE BLOOD BANKING AND FELINE RENAL TRANSPLANTATION.

7.1 Introduction

In this chapter an ethical framework for living animal donation is proposed. The findings of the ethical and empirical analysis are first reviewed and consolidated. Using dominant ethical frameworks for living human blood and organ donation as templates, an adapted framework for living animal donation is created. The proposed framework is then used to assess current regulatory approaches to canine blood donation and feline renal transplantation in the UK.

7.2 Summary of the comparative ethical analysis of living animal donation and empirical analysis of canine blood donation

This section combines a summary of the findings of the comparative ethical analysis in Chapters 3 and 4 and the findings of the empirical analysis in Chapters 5 and 6, highlighting how the empirical analysis has informed the ethical analysis.

The comparative ethical analysis argued that the difference in ethical purpose between a human patient's consent and an animal owner's consent, alongside the lack of capacity of animal donors, means that equivalent informed consent justifications cannot be directly applied to living animal donations (section 4.2.1). Whilst animals cannot consent to their own treatment, they are argued to have morally considerable bodily interests (section 4.2.3), which may conflict with the legal rights that underpin their owner's consent. The comparatively reduced scope of authority of animal owner consent reduces the threshold of harm which their consent may authorise (section 4.2.3). Furthermore, the owner's authorisation of any harm may conflict with a veterinary surgeons comparable duty not to harm their patients (section 4.3.2).

Best interest arguments can be adapted for animal living donation according to the argument that a veterinary surgeon must act in the animal patient's best interests (section 4.3.3). The best interest argument therefore outweighs the authority of owner consent where donation practices are considered harmful. A clinical benefit from donation is necessary to define human and animal living donation as a clinical procedure (RCVS, 2016). However, living donation justified according to the best interest of the donor animal would result in physical or psychological benefit for the donor which outweighs any physical, psychological or wider harm (section 4.3.3).

For human donors, informed consent can justify living donation to a certain threshold of harm (section 3.2.3), but non-consensual donations must be justified according to the donor's best interest (section 3.3.3). Whilst an animal owner's valid informed consent is necessary for all living animal donation (section 4.2.1) it is not sufficient to justify any donation which is not in the best interest of the donor (section 4.3.3)**.** The different interaction between the justifications of informed consent and donor best interest in the human or animal medical settings creates an answer for Research Question 1:

> **The ethical justifications for living human donation *cannot* be directly applied to living animal donation. However, an adapted comparative justification may be made when living donation is in the animal's best interest *and* has the owner's informed consent.**

Such a comparative justification encompasses certain empirical and professional assumptions. Significant empirical assumptions relate to the quality of the owner's consent (section 4.2.2), the validity of identified donor benefits (section 4.3.2) and the accurate assessment of donor harms (section 4.3.1) during the evaluation of a donor's best interest.

Some these empirical assumptions were informed by the empirical analysis of canine blood donation, including the quality of owner consent and varying constructions of donor and recipient benefits.

The empirical analysis found that, like human blood donors (Alaishuski *et al.*, 2008, Pfeffer and Laws, 2006, Busby, 2010), animal owners providing consent for the donation of their dog's blood appeared to lack a full understanding of the processes following donation. However, in line with previous sociological work on choice in donation decision making (Valapour *et al*. 2011; Burnell *et al.*, 2015) the owners suggested that they voluntarily limited their understanding and made choices based solely on the knowledge that they were benefiting other animals. The data analysis extends the role of expectation, optimism and trust from human donation (Lipworth *et al.,* 2011) to animal blood donation. This was evidenced by owners' clear expectations regarding the use of the donated blood, which did not appear entirely consistent with some of the accounts of the veterinary professionals using blood products. The data analysis also highlights the significance of human-animal comparisons in generating and perpetuating some of the owners' expectations. The analysis also identified complex motivations for canine blood donation which encompass an expectation of rewards for the donor as well as other dogs, a strengthening of the human-animal bond and psychological benefits for the owner. The construction of these benefits illuminates the intensity of some human animal bonds but also an apparent hierarchy between humans and animals; pets and rescue dogs whereby the identified benefits for each do not appear equal, this creates several ethical questions in the living animal donation context. Similarly, accounts of the benefits of canine blood transfusion highlighted the risk that the benefits for some animal owners might outweigh those for the transfused animal.

The empirical analysis informs and contextualises the ethical analysis in several ways. It highlights the need for specific information provision for consent to canine blood donation, a transparency rationale for public involvement in blood bank operational decision making and the significant responsibility role of the blood bank in maintaining trust between the public and the veterinary profession in this context. In relation to the best interest

justification of animal blood donation the empirical analysis also raises critical contextual findings. Specifically, animal owners should not be relied upon to accurately perform this test due to their voluntary lack of understanding and the potential for conflicted interests, given the potential for significant psychological benefit for them. In essence, the empirical work has cast doubt on both the reliability and value of owner consent to living animal donation because owners appear to hold false expectations and have interests which may conflict with the donor animal's interests.

The next section identifies frameworks which are used to embed ethical decision making within the regulation and practice of living human donation. These frameworks are then used as templates to assist in the construction of a framework with the similar aim of embedding the thesis findings summarised above within a decision making tool for the veterinary profession.

7.3 Ethical frameworks for human and animal living donation

There is no widely used framework for veterinary ethical decision making such as the principles of biomedical ethics which are so familiar to those working in medical ethics (Beauchamp and Childress, 2013). In broader non-clinical areas of animal use such as food production, ethical frameworks for decision making have been proposed, such as the ethical matrix (Mepham, 1996). This framework has been used to evaluate many different aspects of animal use such as animal research, agriculture and artificial reproductive techniques (Howard, 2005; Webster, *et al.,* 2010; England and Millar 2008). However, the ethical matrix has only rarely been applied to ethical dilemmas in veterinary practice (Millar, 2013). The use of animals in research is also commonly guided by specific ethical frameworks such as the 3Rs (Russell and Burch, 1959), although many challenges to effectively applying this ethical framework have been raised, such as a lack of uptake of reduction methods by scientists (Kilkenny *et al*. 2009), poor progress with refinement due to a reluctance to report negative results (Magalhaes-Sant'Ana *et al.* 2009), and

the definitional imprecision of harm-benefit analysis (Grimm, 2015). Ethical approaches to evaluating veterinary care, however, appear to be even less consistent, including in the specific area of living animal donation.

Price (2000) has argued that the inherently controversial nature of human living donations, based upon their non-therapeutic nature, led to vagueness in the application of any relevant general legal principles and consequent pressure for specific legislation, with the result that most countries which conduct living donations now have such legislation in place. In fact, concern for the ethical consistency of donation and transplant policy in a global context has been sufficiently great in recent years to result in international resolutions and guidelines. For example, the World Health Assembly (WHA) passed a resolution in 1975 which aimed to promote the health and safety of blood donors and the recipients of blood and blood products (WHA, 1975), this resolution was subsequently developed by the International Society of Blood Transfusion (ISBT) who endorsed their first formal Code of Ethics in 1980, this Code was later endorsed and adopted by the World Health Organisation (WHO) and the League of Red Cross and Red Crescent Societies (LRCRCS) (Beal, 2002). The most recent incarnation of the ISBT Code was published in 2000 and has also been endorsed by WHO (ISBT, 2000). With regards to cell, tissue and organ donation, the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation (2010) are also endorsed by the WHA, and have reportedly greatly influenced professional codes and practices as well as legislation around the world (WHO, 2010). Academic literature promotes the use of these frameworks in developing ethical national donation policies (Rudge, 2010; Chapman, 2010). The WHO (2010) and ISBT (2000) frameworks will be used as templates to assist in the construction of a comparative veterinary framework.

The human codes state that their aims are '*to define the ethical principles and rules to be observed in the field of transfusion medicine* (ISBT, 2000:p.165)' and '*to provide an orderly, ethical and acceptable framework for the acquisition and transplantation of human cells, tissues and organs for*

therapeutic purposes (WHO, 2010:p.1)'. These human frameworks aim to transfer theoretical knowledge into a practical decision making tool. As such, they embed many of the previously identified ethical arguments explored in Chapter 3 into structured guidance for those making clinical decisions in the field of donation. This section uses the identified human frameworks as a template to construct a similar framework which incorporates the adapted ethical justifications, informed by empirical analysis, into a decision making tool for the veterinary profession. First, it is shown how the human codes identify and address specific ethical justifications and concerns which were explored in Chapter 3. The relevant human code provisions are then adapted in light of the comparative findings of Chapter 4 to create an adapted framework for the veterinary setting which also incorporates specific elements of the empirical analysis in Chapters 5 and 6.

The WHO guiding principles state that they *'do not apply to the transplantation of gametes, ovarian or testicular tissue, or embryos for reproductive purposes or to blood or blood constituents collected for transfusion purposes'* (WHO, 2010:p.1), whereas the ISBT code (2000) is concerned only with the field of transfusion medicine. Chapter 3 set out that in living human donation features such as low harm and the regeneration of donated blood results in an accepted ethical difference between the donation of blood and solid tissue. However, Chapter 4 argued that the increased harms and risks associated with blood donation in some animal species, together with the fact that all donations must be taken without the animal's consent means that clear distinctions between the harms of donating regenerative and non-regenerative tissue are not transferable to the veterinary setting. For this reason, the proposed framework for living animal donation encompasses the donation of both regenerative and non-regenerative animal tissue, including blood for transfusion. In the next section, therefore, both the identified human codes are examined concurrently, in order to work towards the creation of a combined veterinary framework.

7.4 An ethical framework for animal donation.

In this section the core normative findings of Chapter 2 are identified within specific extracts of the human codes of ethics for living donation (all emphasis added), and, using the thesis findings summarised above, these are then adapted to create comparative provisions for the veterinary context. The proposed animal donation ethical framework, which is presented in full in section 7.4.5, is structured around adapted provisions for owner informed consent, non-consensual animal donation, donor harm, donor benefit and recipient benefit.

7.4.1 Informed consent

In both human codes the donor's informed consent is a requirement for the living donation of blood and solid tissue. The provisions give detail on the specific information which is required, including the risks, benefits and consequences of donation.

WHO GUIDING PRINCIPLES	**ISBT CODE OF ETHICS**
*'Live donations are acceptable when a donors **informed and voluntary consent** is obtained'* *'Live donors should be informed of the probable **risks, benefits and consequences** of donation in a complete and understandable fashion' (p.3)*	*'The donor should provide **informed consent** to the donation of blood or blood components and to the subsequent (legitimate) use of blood by the transfusion service' (Code 1)*

Table 3 Human donation ethical frameworks: Consent provisions.

In order to adapt the consent provision for the veterinary setting it is important to review a central difference between human and animal living donation identified in Chapter 3, which is the reduced moral role of informed consent in the veterinary setting. The argument was made that veterinary living donation cannot be justified on the basis of donor consent because animals do not have the capacity to make fully informed choices about such techniques (section 4.2.4). Furthermore, whilst owner informed consent is

legally required for donation in the veterinary setting (Flemming and Scott, 2004; RCVS, 2014) the legal purpose is to protect the owner's property rights.

Therefore, whilst an animal owner's consent must feature in the adapted framework its different purpose must be made clear. The provision of specific information regarding the use of donated tissue is additionally informed by the empirical analysis in Chapters 5 and 6 which showed that the owners of canine blood donors extrapolated their understanding of human blood systems to the veterinary setting, particularly with regard to the allocation and use of donated tissue.

Below are the adapted informed consent provisions for the animal donation ethical framework:

1.1 Companion animals do not have the capacity to consent to living donation procedures.
1.2 Living animal donation cannot be justified on the basis of donor informed consent.
1.3 An animal owner's valid informed consent is legally required to protect their property rights.
1.4 An owner's informed consent is only valid when made with an appropriate understanding of all relevant information including the risks, benefits and consequences of animal donation procedures. Decision making should always be based on appropriate factual understanding of the actual animal donation processes and not extrapolated from an understanding of human systems.
1.5 The unusual nature of living animal donation requires specific information provision, including the planned allocation and use of donated tissues and the potential for both donor and recipient benefits.
1.6 The quality of owner consent should be regularly evaluated.

Table 4 Animal donation ethical framework: Consent provisions.

7.4.2 Non-consensual animal donation

Non-consensual donation is impermissible for human donors according to the WHO guidelines, with narrow exceptions which relate both to minors and

those who are legally incompetent. Non-consensual blood donation does not occur and is not addressed at all in the ISBT codes.

WHO GUIDING PRINCIPLES	*'No cells, tissues or organs should be removed from the body of a living minor for the purpose of transplantation other than the narrow exceptions allowed under national law. Specific measures should be in place to protect the minor and, wherever possible the minor's* ***assent*** *should be obtained before donation. What is applicable to minors also applies to any legally incompetent person.' (P.4)*

Table 5 Human donation ethical frameworks: Non-consensual donation provisions

The WHO principles additionally state that the most significant exceptions relate to the familial donation of regenerative cells and kidney transplants between identical twins. The guidance also states that:

> While the permission of the parent(s) or the legal guardian for organ removal is usually sufficient, they may have a conflict of interest if they are also responsible for the welfare of the intended recipient. In such cases, review and approval by an independent body, such as a court or other competent authority should be required. In any event, a minor's **objection** to making a donation should prevail over the permission provided by any other party (p.5).

Whilst non-consensual organ donations in humans are therefore rare, they are exceptionally permitted for familial benefit (which arguably includes a donor benefit). The potential for conflicted interests leads to the recommendation for independent review and approval. The provisions also uphold the discussions in Chapter 3 over assent and dissent which was argued to be necessary to prevent psychological harm to the non-consenting donor and to respect limited autonomy.

In Chapter 4, all animal donations were considered non-consensual since it is not the donor's consent which is obtained in the veterinary setting. Therefore, it is of little benefit to the aim of building a comparable framework

to prohibit non-consensual animal donations with narrow exceptions. It was also argued that recent debate which promotes the use of non-consenting human donors where it is non-harmful or even in the donors interests (Wilkinson, 2011; Van-Assche *et al.*, 2014) could be transferred to the veterinary setting because the best interest argument respects the veterinary surgeon's duty to have first regard for animal welfare (RCVS, 2014b), promote the best interests of animal patients (BVA, 2016) and not to harm animal patients (Yeates, 2009). Whilst clarification is required over the meaning of the 'immediate group' clause (RCVS, 2016), it was argued that there could be no justification for a veterinary surgeon harming one animal for the benefit of another. A donor best interest justification was claimed to be the only transferrable argument for living animal donation.

This argument, which is not yet directly applied in the WHO code, therefore creates a more permissive framework for non-consensual animal donation. The findings of Chapter 3 indicate that concerns regarding donor dissent are directly transferrable to the veterinary setting according to current understandings of fear and distress in animals (this will be included under the 'donor harm' provision) and Chapter 6 illustrated that conflicted interests between animal donors and their owners may exist, which extends the applicability of independent donor advocacy to all animal donations. Assessment of the best interest test in the veterinary setting should therefore be the responsibility of the veterinary surgeon, according to their professional responsibilities.

2.1 Living animal donation may only be justified when it is in the donor's best interest to donate, according to the professional responsibilities of the donor's veterinary surgeon.

2.2 The balance of harms and benefits to the donor must therefore show that donation is in their interest overall.

2.3 The allocation of donated blood and tissue should aim to preserve the best interest of the donor. Where tissue is banked before use the potential future needs of the donor must be addressed.

2.4 The owners of donor animals may have a conflict of interest when presenting their animal as a donor. Therefore, responsibility for the best interest assessment lies with the veterinary surgeon (or an independent advocate if the veterinary surgeon is also responsible for the intended recipient).

Table 6 Animal donation ethical framework: Donor best interest provisions

7.4.3 Donor harm and donor benefit

For animal donations to be justified on the basis of a donor's best interest it will be necessary to clearly balance the harms and benefits to the donor. Whilst the human frameworks deal primarily with consensual donations, donor harm is still a visible feature in both the examples

WHO GUIDING PRINCIPLES	**ISBT CODE OF ETHICS**
*'High quality, safe and efficacious procedures are essential for donors and recipients alike. The long-term outcomes of cell, tissue and organ donation and transplantation should be assessed for the living donor as well as the recipient in order to document **benefit and harm** '(p.8)*	*'The donor should be advised of the **risks** connected with the procedure; the donor's health and safety must be protected.' (Code 3)* *'Donors and recipients should be informed if they have been **harmed**' (Code 9)*

Table 7 Human donation ethical frameworks: Donor harm provisions

Donor benefit is not specifically addressed in either framework and whilst this is an area of growing academic interest, Chapter 3 argued that donor benefit is widely regarded to be encompassed within donor informed consent (Wilkinson, 2011; Price, 2000). As such, donor benefit is generally not separately identified for consensual donations (however, see Spital 2004). It was also argued that, according to recent literature (Busby, 2004; Shaw 2015; Moorlock *et al*. 2014), traditional altruistic motivations for donation are being replaced by notions of donor benefit. According to the findings of Chapter 3, then, whilst the human frameworks currently promote altruism and are opposed to payment for donation, this recent work might instead suggest replacing altruism with valid donor benefits.

WHO GUIDING PRINCIPLES	**ISBT CODE OF ETHICS**
*'Promotion of **altruistic** donation of human cells, tissues or organs by means of advertisement or public appeal may be undertaken in accordance with domestic regulation'. (P.6)* *'Cells, tissues and organs should only be donated **freely,** without any **monetary payment** or other **reward of monetary value.** Purchasing, or offering to purchase, cells, tissues or organs for transplantation, or their sale by living persons or by the next of kin for deceased persons, should be banned'. (p.5)* *'Physicians and other health professionals should not engage in transplantation procedures and health insurers should not cover such procedures, if the cells, tissues or organs concerned have been obtained through **exploitation or coercion of, or payment to**, the donor or the next of kin of a deceased donor'(p.6)* *'All health care facilities and professionals involved in cell, tissue or organ procurement and transplantation procedures should be prohibited from receiving any payment that exceeds the **justifiable fee** for the services rendered.' (p.7)*	*'Blood donation including haemopoietic tissues for transplantation shall, in all circumstances, be **voluntary and non-remunerated**. No **coercion** should be brought to bear upon the donor' (Code 1)* *'A **profit motive** should not be the basis for the establishment and running of a blood service'. Code 2* *'There should be no **financial incentive t**o prescribe a blood transfusion'. (Code 16)*

Table 8 Human donation ethical frameworks: Donor benefit provisions

Chapter 4 explored the comparative harms and benefits for animal donors and argued that physical, psychological and wider harms exist for both donor humans and donor animals and that additional harm may be caused by some animal donation practices. Whilst donor animals may theoretically benefit from donation either directly or indirectly (through donating to a companion

or through the banking of donated tissues), the empirical data also illuminated psychological benefits of animal donation experienced by the animal's owner (Chapter 6). Furthermore, that illusory donor benefits such as food and healthcare are being used to justify some living animal donations was argued in Chapter 6. The veterinary framework therefore addresses the specific harms and the genuine or illusory benefits which donor animals may experience (Chapters 4 and 6) in place of the human framework's focus on altruism and payment.

3.1 Whilst harm is permissible where justified by benefits to the donor, the degree of harm caused to donors should always be the minimum necessary.

3.2 Assessments of donor harm should include a consideration of physical, psychological and wider harms.

3.3 For animal donors harm includes but is not limited to :

1. Physical pain, anaesthetic risk, temporary or permanent physiological or physical alteration;
2. Psychological fear and distress;
3. Wider impacts of altered husbandry, handling, treatment, breeding, genetic modification.

3.4 Taking a donation from a dissenting animal donor represents a greatly increased psychological harm.

3.5 A genuine physical or psychological benefit to the donor might include assured future access to banked blood or tissue or donating to a close companion. Benefits which depend upon a social inequality between the donor and recipient such as free healthcare or re-housing for rescue animals may not be used to justify the donation.

3.6 Financial and non-financial payment for donation should be discouraged, even where the justification is independent of financial reward; payment for donation increases the risk of conflicts of interest between owner and animal. It also risks the exploitation of vulnerable animals.

Table 9 Animal donation ethical framework: Donor harm and donor benefit provisions.

7.4.4 Recipient benefit

The use of the donated tissue is addressed to a limited extent in both the human codes.

WHO GUIDING PRINCIPLES	**ISBT CODE OF ETHICS**
*'The **allocation** of organs, cells and tissues should be guided by clinical criteria and ethical norms, not financial or other considerations. Allocation rules, defined by appropriately constituted committees, should be **equitable, externally justified, and transparent**.'(p.7)*	***'Genuine clinical need** should be the only basis for transfusion therapy.' (Code 13)* ***'Wastage** should be avoided in order to safeguard the interests of all potential recipients and the donor.'(Code 17)*

Table 10 Human donation ethical frameworks: Recipient benefit provisions.

A clinical benefit from donation was earlier suggested to define human or animal donation procedures as clinical in nature, as opposed to a research procedure (Chapters 2 and 3). Whilst human consensual donations are assumed to benefit consenting donors (Price, 2000; Wilkinson, 2011) (Chapter 3), for non-consensual animal donations which are conducted in the best interest of the donor, the benefits for the recipient will either determine the scale of the benefit for the donor or, in the case of banked tissue, *are* the benefits for the donor (Chapter 6). Furthermore, the additional complexity presented by the identification of human benefits from animal donations (Chapter 6) must also be dealt with. As such, the relationship between donor, recipient and third party benefit needs additional clarification in the veterinary setting. The empirical work in Chapters 5 and 6 raised comparable concerns over donated tissue use to those identified in the human frameworks regarding wastage, unfairness and the need for transparency to maximise donor and recipient benefit. These specific findings are also included in the veterinary framework.

4.1 A clinical benefit for the recipient is necessary to define donation as a veterinary procedure.

4.2 The likely recipient benefit may also determine the scale of the benefit for the donor. However, benefits to the recipient may not be used to justify living donation which is not in the best interest of the donor.

4.3 Benefits to parties other than the recipient and the donor are not currently recognised as relevant to the ethical justification of living animal

donations. **4.4** Genuine clinical need should be the only basis for treatment with donated tissue. The wastage of donated tissue should be avoided to safeguard the interests of the donor and recipients. **4.5** The donor and recipient should be treated as moral equals by the veterinary profession. The benefits identified for donors and recipients should not depend upon inequalities in their societal worth. **4.6** The multiple stakeholders involved in animal donation decisions necessitate openness and transparency from all parties. Tissue banks, veterinary professionals and animal owners must take responsibility for communicating their sphere of knowledge to other parties. **4.7** Living animal donation policy should include an agreed route for regular and transparent communication between all parties.

Table 11 Animal donation ethical framework: Recipient benefit, fairness and transparency provisions.

7.4.5 The animal donation ethical framework.

The animal donation ethical framework, which is displayed in full below, provides a route through which the veterinary profession, animal owners and tissue banks can make living donation decisions for animals which are consistent with current ethical understanding of living donation in the human medical field, and which are contextualised by empirical sociological analysis.

FRAMEWORK PROVISION	PROVISION DETAIL
1. OWNER INFORMED CONSENT	**1.1** Companion animals do not have the capacity to consent to living donation procedures. **1.2** Living animal donation cannot be justified on the basis of donor informed consent. **1.3** An animal owner's valid informed consent is legally required to protect their property rights **1.4** An owner's informed consent is only valid when made with an appropriate understanding of all relevant information including the risks, benefits and consequences of animal donation procedures. Decision

	making should always be based on appropriate factual understanding of the proposed animal donation processes and not extrapolated from an understanding of human systems. **1.5** The unusual nature of living animal 'donation' requires specific information provision including the planned allocation and use of donated tissues and the potential for both donor and recipient benefits. **1.6** The quality of owner consent should be regularly evaluated.
2. DONOR BEST INTEREST	**2.1** Living animal donation may only be justified when it is in the donor's best interest to donate, according to the professional responsibilities of the donor's veterinary surgeon. **2.2** The balance of harms and benefits to the donor must therefore show that donation is in their interest overall. **2.3** The allocation of donated blood and tissue should aim to preserve the best interest of the donor. Where tissue is banked before use the potential future needs of the donors must be addressed. **2.4** The owners of donor animals may have a conflict of interest when presenting their animal as a donor. Therefore responsibility for the best interest assessment lies with the veterinary surgeon (or an independent advocate if the veterinary surgeon is also responsible for the intended recipient).
3. DONOR HARM	**3.1** Whilst harm is permissible where justified by benefits to the donor, the degree of harm caused to donors should always be the minimum necessary. **3.2** Assessments of donor harm should include a consideration of physical, psychological and wider harms. **3.3** For animal donors harm includes but is not limited to: 1. Physical pain, anaesthetic risk, temporary or permanent physiological or physical alteration; 2. Psychological fear and distress;

	3. Wider impacts of altered husbandry, handling, treatment, breeding, genetic modification. **3.4** Taking a donation from a dissenting animal donor represents a greatly increased psychological harm
4. DONOR BENEFIT	**4.1** A genuine physical or psychological benefit to the donor might include assured future access to banked blood or tissue or donating to a close companion. **4.2** Benefits which depend upon a social inequality between the donor and recipient such as free healthcare or re-housing for rescue animals may not be used to justify the donation. **4.3** Financial and non-financial payment for donation should be discouraged even where the justification is independent of financial reward; payment for donation increases the risk of conflicts of interest between owner and animal. It also risks the exploitation of vulnerable animals.
5. RECIPIENT BENEFIT AND FAIRNESS	**5.1** A clinical benefit for the recipient is necessary to define donation as a veterinary procedure. **5.2** The likely recipient benefit may also determine the scale of the benefit for the donor. However, benefits to the recipient may not be used to justify living donation which is not in the best interest of the donor. **5.3** Benefits to parties other than the recipient and the donor are not currently recognised as relevant to the ethical justification of living animal donations. **5.4** Genuine clinical need should be the only basis for treatment with donated tissue. The wastage of donated tissue should be avoided to safeguard the interests of the donor and recipients. **5.5** The donor and recipient should be treated as moral equals by the veterinary profession. The benefits identified for donors and recipients should not depend upon inequalities in their societal worth.
6. TRANSPARENCY	**6.1** The multiple stakeholders involved in animal donation decisions necessitate openness and transparency from all parties. Tissue banks, veterinary

	professionals and animal owners must take responsibility for communicating their sphere of knowledge to other parties. **6.2** Living animal donation policy should include an agreed route for regular and transparent communication between all parties

Table 12 The animal donation ethical framework

The next section explores the implications of this novel ethical framework for the UK regulation of living animal donation.

7.5 Regulatory implications for companion animal blood donation and feline renal transplantation in the UK.

The human codes of ethics have influenced legislation in many countries (WHO, 2010). The UK regulatory implications of the animal donation ethical framework are now explored using the cases of companion animal blood donation and feline renal transplantation. These cases have been chosen because they are the only areas in which UK legislation is specifically concerned with living animal donation. As was the case in the empirical chapters, animal blood donation is considered in the greatest detail because it is the only example of living animal donation which is commonly performed in the UK. However, in line with the assertion that no bright line exists between the ethics of regenerative and non-regenerative living animal donation feline renal transplantation will also be briefly considered. It is likely that living animal donation policy in other countries will vary significantly; the aim here is to show how the framework might be used in developing new regulatory approaches. First, the current legislation relevant to each of the two donation areas is outlined, before the changes required to regulate animal donation in a way which conforms to the provisions of the animal donation ethical framework are considered.

7.5.1 Companion animal blood donation

Veterinary surgeons in the UK legitimately undertake procedures on animals which might cause pain or suffering and are provided with a legal framework

to work within. Most recently this framework comes in the form of the Veterinary Surgeons Act (1966). Quite significantly for this thesis the existence of this legislation can be seen as a legal recognition of the potential for harm to be caused to animals within the veterinary setting and the consequent need for regulation. UK veterinary surgeons are professionally governed by the RCVS which is tasked with ensuring that the professional conduct of veterinary surgeons adheres to the provisions of the applicable legislation. The RCVS achieves this by producing professional guidance.

In the case of blood collection for clinical use the relevant RCVS professional guidance quite unusually gives reference to three separate pieces of legislation; the Animals (Scientific Procedures) Act 1986 (ASPA), the Veterinary Surgeons Act (VSA) (1966) and the Veterinary Medicines Regulations (VMR) (RCVS, 2014b). The ethical complexities which feature in this clinical area therefore appear mirrored in the current legislative approach, which this section frames as multi-layered and complex. This complexity results from and contributes to a lack of clarity concerning the ethical justifications which support living animal donation practices. The animal donation ethical framework is used to argue for a more streamlined regulation which, in turn, would offer greater clarity to practitioners.

The relevance of each piece of current legislation to the practice of companion animal blood donation is now outlined with a focus on their lack of defined boundaries or clear ethical rationale. The efficacy of the current legislation in protecting animal donors and supporting practitioners in this area is ultimately questioned.

Veterinary Surgeons Act (1966)

It is through this Act that the RCVS is empowered to manage the UK veterinary profession, including the regulation of their education and professional conduct. It is clear that much has changed within the profession since the Act was passed in 1966 (Hobson-West and Timmons, 2015) and as a result the Act has been widely amended and supporting guidance provided,

including the guidance specifically relating to animal blood donation and transfusion which was added in 2007. As is the case for many innovative or developing areas of veterinary medicine, the RCVS guidance primarily aims to clarify whether and when such new procedures are classed as 'recognised veterinary practice' and thus are exempted from the A(SP)A (1986) and thereby subject to RCVS regulation. The case of animal blood donation is described below:

> Taking blood from healthy donors with the permission of the owner and with the intention of administering the blood or its products to a recipient is recognized veterinary practice where there is an **immediate or anticipated clinical indication** for the transfusion. Such a clinical procedure would be acceptable **on the scale of an individual veterinary practice or between other practices in the locality.** (RCVS, 2014: section 27.2)

In order to introduce the argument that this legislation has unclear boundaries, it is important to highlight that the guidance then goes on to state that the collection of blood for the preparation of blood products on a larger commercial scale or for general therapeutic use in animals may need to be licensed under A(SP)A and the VMR[16].

As explored in Chapter 4 and stated in the animal donation ethical framework, donated tissue must be used for clinical benefit in order to define

[16] The precise wording of this guidance is as follows:
27.20 Section 2(8) of the Animals (Scientific Procedures) Act 1986 exempts procedures conducted as part of any recognised veterinary, agricultural or animal husbandry practice. Taking blood from healthy donors with the permission of the owner and with the intention of administering the blood or its products to a recipient is recognised veterinary practice where there is an immediate or anticipated clinical indication for the transfusion. Such a clinical procedure would be acceptable on the scale of an individual veterinary practice or between other practices in the locality. However, the collection of blood for the preparation of blood products on a larger commercial scale for general therapeutic use in animals may require licences under the Animals (Scientific Procedures) Act 1986; this larger commercial scale activity would need to be licensed under the Veterinary Medicines Regulations.
RCVS. 2014b. *RCVS Code of Professional Conduct for Veterinary Surgeons* [Online]. Available: http://www.rcvs.org.uk/advice-and-guidance/code-of-professional-conduct-for-veterinary-surgeons/supporting-guidance/miscellaneous/ [Accessed 01-10-14.

donation procedures as a veterinary, rather than scientific procedure. However, it is not clear on what basis the additional criteria (namely the immediacy of need, the scale of blood collection procedures and the geographical distance which blood may travel) dictate the boundaries of what is deemed to be 'veterinary practice' in this context. Furthermore, these additional criteria do not clearly fit with, and appear to arbitrarily supplement, those which are used to define veterinary practice in section 27 of the VSA[17].

Animals (Scientific Procedures) Act (1986)

This Act was created to make new provision for the protection of animals used for experimental or other scientific purposes (ASPA, 1986). The legislation aims to manage the infliction of harm to animals for scientific purposes. It begins by defining which procedures are to be brought within its terms:

> 'A regulated procedure' for the purposes of this Act means any experimental or other scientific procedure applied to a protected animal which may have the effect of causing that animal pain, suffering, distress or lasting harm. (ASPA, 1986: Section 2(1))

Procedures defined as 'a regulated procedure' must be justified according to anticipated societal benefits, and the level of harm which may be caused is defined according to the strict terms of the Act. This legislation would clearly be relevant to the protection of animals (including companion species) that provide blood for scientific or experimental use[18], but it is unclear why this

[17] Section 27 of The Veterinary Surgeons Act (1966) defines acts of veterinary surgery as follows: "veterinary surgery" means the art and science of veterinary surgery and medicine and, without prejudice to the generality of the foregoing, shall be taken to include—

> (a) The diagnosis of diseases in, and injuries to, animals including tests performed on animals for diagnostic purposes; (b) the giving of advice based upon such diagnosis ; (c) the medical or surgical treatment of animals; and(d) the performance of surgical operations on animals.

[18] For example horse and sheep blood for blood agar production.

legislation should be relevant to the large scale production of blood products for use in veterinary treatment.

The RCVS guidance on Recognised Veterinary Practice deals specifically with the relationship between the Veterinary Surgeons Act (1966) and A(SP)A. This guidance confirms that it is the primary *purpose* of a procedure which will determine whether it is legally considered a scientific or a veterinary procedure, even if the *nature* of the procedure itself is identical[19]. The guidance states that if the intervention is of direct benefit to the animal *or its immediate group (i.e. others of the same species)* it should be defined as recognised veterinary practice, and dealt with under VSA. However, if the intervention is for an experimental or other scientific purpose it would be controlled by A(SP)A. One might, therefore, consider that the taking of blood donations for the direct clinical benefit of other animals of the same species would be classed as recognised veterinary practice. Whereas, if the blood collected were to be used for research purposes which might only indirectly benefit other animals, or benefit humans it would be considered a scientific procedure.

Against this background it is not immediately clear how the commercial scale and geographical distance criteria clearly raised by the RCVS in the specific guidance relating to blood banking can safely and credibly lead to a distinction between veterinary and scientific procedures.

Furthermore, the RCVS states that the source animal in blood transfusion for use in 'clinical cases' is an example of the 'immediate group' who may be expected to benefit from veterinary procedures. The guidance then goes on to specifically exclude source animals used for blood collection on a larger

[19] 25.6 In all circumstances, the individual has to consider the primary purpose and whether he or she is acting in a professional capacity as a veterinary surgeon or as a research scientist. Although the procedures and techniques may be identical, analysis of the purpose for which they are applied should help the veterinary surgeon to determine if the intervention is of direct benefit to the animal or its immediate group (i.e. others of the same species) and therefore recognised veterinary practice, or, if the intervention is for an experimental or other scientific purpose and controlled by the A(SP)A. RCVS supporting guidance section 25 *Recognised Veterinary Practice*

commercial scale (RCVS, 2016)[20]. The wording as well as the meaning of this particular legislation is remarkably unclear since it appears to suggest both that the source animal is benefitting from blood donation (and hence is part of the immediate group) and that blood collected on a larger commercial scale is necessarily *not* used in the treatment of 'clinical cases'.

It appears that animal blood donation is not the only example of unclear boundaries between the two Acts, with considerable recent correspondence in *The Veterinary Record* being focused on the boundaries of their relevance in veterinary clinical trials (Braidwood, 2015; Hockey, 2015; Najiani, 2015).

The effect of this uncertainty is that it is not at all clear which specific circumstances of animal blood donation would result in a requirement for licensing under A(SP)A. It is important to note that neither of the canine blood banks currently operating on a commercial basis in the UK has been required to do so.

Veterinary Medicines Regulations

The advent of the collection of blood for processing and the production of blood products on a commercial scale created an additional licensing requirement. Aside from the legislation discussed above which relates to professional conduct, the blood products, once they are removed from the donor animal, become a commodity which is of interest to regulators in terms of its quality and safety. The RCVS guidance above states that organisations

[20] RCVS supporting guidance section 25: Recognised Veterinary Practice 25.26b. **Immediate group**

i. The herd or flock under the care of the veterinary surgeon.

ii. The pack of dogs or colony of cats under the care of the veterinary surgeon.

iii. The source animal in blood transfusion for use in clinical cases, but not on a larger commercial scale.

RCVS. 2016. *Recognised Veterinary Practice* [Online]. Available: http://www.rcvs.org.uk/advice-and-guidance/code-of-professional-conduct-for-veterinary-surgeons/supporting-guidance/recognised-veterinary-practice/ [Accessed 07-02-17.

producing blood products on a commercial scale must be licensed by the Veterinary Medicines Directorate (VMD) which aims to ensure responsible, safe and effective use of veterinary medicinal products. The VMD guidance note states that:

> A non-food animal blood bank authorisation (NFABBA) authorises the collection, storage and supply of blood, for use in non-food producing animals to meet unforeseen or exceptional needs. The authorisation also permits the blood to be placed onto the market without the need for a manufacturing authority (MA) as long as no medicinal claims are made (VMD, 2014:p.83).

One interesting aspect of this guidance is that it introduces a further boundary for consideration; that of animal species. That is to say that such an authorisation is only applicable to blood collected from non-food producing animals i.e. companion animals. It is not made clear why production species such as cattle or pigs are not included in this legislation.

The VMD Guidance note also specifically addresses the earlier question about the precise circumstances which would result in the requirement for licensing under A(SP)A:

> In setting up a blood bank it is expected that the animals used as donors will be rescue animals waiting for re-homing or pet animals, and that the blood donation procedure will not require animal sedation. If the donor animals are kept in a colony for the specific purpose of blood donation, or the blood donations require sedation of the animal, then an application for a Home Office Licence under the Animals (Scientific Procedures) Act (ASPA) 1986 and an NFABBA from the VMD will be required (VMD, 2014: p.94).

What is perplexing about this statement is that it would seem to contradict the earlier assertion by the RCVS that the determining factor in deciding whether a procedure was to be considered scientific or veterinary in nature

was the primary purpose for which it was performed (except when blood is collected on a commercial scale). Here we have additional information which suggests that the way the donor animal is kept (i.e. as part of a colony or as a pet), and also the manner in which the donation is taken (conscious or sedated) are also relevant to the legislative boundary between veterinary and scientific procedures.

Finally, the Veterinary Medicines Regulations also contain specific criteria concerning the welfare of donor animals (Appendix 1)[21] including, for example, consideration of their health status, physical compliance and the frequency of blood donation. It is suggested that these criteria have *'been agreed (p.28)'* with the RCVS and the Home Office but given that the VMD regulations are only intended to apply to animals donating to commercial blood banks it is surprising to note that such detailed consideration of donor welfare is only addressed here, rather than in the RCVS code.

Summary of current legislation

This brief analysis of the legislation relating to the collection and use of animal blood is intended to highlight some of the legislative complexities of this area. The legal boundaries which are specified in the regulation of animal transfusion medicine appear from this analysis to be somewhat arbitrary. However, when taken together, the provisions do perhaps support some of the ethical discussion in this thesis, namely that there should be a limit to the wider harm which a healthy animal may encounter in line with the aims of the VSA and that, in the interests of fairness, a donor animal should be seen as part of the 'group' which are benefitting from blood transfusion medicine, rather than part of a donor colony. As such, the existing legislation rather obliquely identifies with some of the critical ethical questions discussed, but attempts to manage them in an inconsistent and overly complex manner.

To illustrate the point, the table below clarifies the boundaries which have been used to determine when each legislative framework applies:

[21] Annex 1 (p. 27) *CRITERIA FOR USE OF BLOOD DONORS FOR NON-FOOD ANIMAL BLOOD BANKS* https://www.vmd.defra.gov.uk/pdf/vmgn/VMGNote15.pdf

Donor type	Local Transfusion	General Transfusion	Banked products	Research use
Pet species	VSA	VSA/NFABBA	VSA/NFABBA	ASPA
Sedated pet species	VSA	ASPA/NFABBA	ASPA/NFABBA	ASPA
Colony pet species	Possibly ASPA	ASPA/NFABBA	ASPA/NFABBA	ASPA
Production species	VSA	Possibly VSA	Possibly VSA	ASPA

Table 13 The complexity of UK legislative boundaries in animal blood transfusion

When viewed in this way, not only is it unclear which legislation is applicable in each situation but, most importantly, it is unclear *why* different legislation is applicable in each circumstance.

For veterinary surgeons practising in this area the legislation is difficult to understand. To assist, the RCVS have recently been obliged to produce advice outlining what vets are 'allowed to do' when collecting blood from healthy animals for use in transfusion as part of their 'RCVS Knowledge' series of web based professional training (RCVS, 2014a).

This section now moves on to examine how the proposed animal donation ethical framework might be used to streamline the current regulatory approach.

Proposed regulatory approaches

The regulation of canine blood donation has been shown to sit uncomfortably across legislation which regulates veterinary and scientific procedures. An improved regulatory approach would ideally situate living animal donation procedures within one law, or more clearly define the basis upon which the legislative boundaries are drawn.

The animal donation ethical framework clarifies that whilst a clinical benefit for the recipient *defines* a veterinary donation procedure (provision 5.1), it cannot be *justified* on this basis alone (provision 5.2). Rather, a donor best interest justification is required for living animal donation procedures which are conducted under the VSA (provision 2.1). Harmful scientific procedures, however, are currently justified according to wider animal or human benefits (section 4.2.3), and are most likely to be performed *against* the interests of the individual animal (Smith and Boyd, 1991). The animal donation ethical framework demarcates veterinary donation procedures according to their ethical justification, in addition to their purpose. Therefore, any donations which are not in the donor's interest, even if they intend to produce blood for clinical transfusion, would need to be classified as a scientific procedure, and justified according to wider animal or societal benefits.

This approach would alter current animal blood donation policy considerably by focusing veterinary blood donation systems wholly on the interests of the donor. It would be likely to mean that blood could only be taken when it is part of an organised system which succeeds in providing beneficial blood transfusions to all animals (including the donors) or where individual blood donation aims to save the life of the donor's companion. In this way the awkward legislative distinctions between large scale animal blood banking and one to one transfusions is lost because both must now aim to benefit the donor. In fact, the large scale processing and banking of animal blood may be more easily justifiable than one to one donations because it is more likely that the donation will ultimately benefit the donor. The VMR role would become limited to considerations of blood product quality, rather than donor welfare, since donor harm would be centrally addressed under veterinary legislation for all blood donors. Some of the more specific harm concerns raised by current legislation, such as the sedation of blood donors or the creation of colonies of donors, might be re-evaluated when considered alongside benefits to donor animals. For example, sedating an animal for a blood donation which is intend to save the life of its companion may seem

justifiable, whereas repeated sedation for donation to a blood bank may not. By way of further example, the creation of donor colonies would become difficult to justify pursuant to an assessment of the interests of the donor animals themselves.

Most importantly, this new policy would demand the justification of all harms caused to blood donors rather than wholly permit some harms but exclude others.

In the event that a best interest justification for animal donation is not identified, classification of the donation as a scientific procedure is the only visible alternative. This option would provide much greater flexibility in the scale and types of harm permissible without any benefit to the donor because the donation need only be justified by wider benefits. Such reclassification would, however, represent a far greater alteration to current practise than implementing a best interest justification. A(SP)A regulation of living animal donations will not be considered further in this thesis, however, as it is not consistent with the research aims of generating a comparative justification for living animal donation.

Examining the boundary between these legislative frameworks through the lens of living animal donation might even be argued to support the claim that veterinary procedures should be in the best interest of animals. Since presumably both scientific and veterinary procedures are intended to create some form of benefit, if wider human and animal groups or populations may benefit from animal scientific procedures, then surely only a focus on *individual* animal benefit may distinguish the purpose of a veterinary procedure.

If revised regulation according to the animal donor ethical framework were to be implemented, the provisions which relate to the contextual empirical data analysis in Chapters 5 and 6 provide additional detail on how animal owners and veterinary professionals could improve the ethical validity of animal blood donation practices. For example, by discouraging ‘in kind’ rewards for

blood donation (provision 4.3) and refocusing on the donor and recipient as equals (provision 5.5), the use of kennelled donor animals might be re-evaluated. A focus on fair allocation and reducing blood wastage (provision 5.4) would benefit both donor and recipient animals and raising awareness of misplaced human-animal comparisons and the expectations of donor owners would improve the quality of owner consent (provision 1.4).

Finally, a renewed focus on transparency and communication (provision 6.1) is essential to more effectively address the concerns obliquely raised by the RCVS regarding the distance generated between donor and recipient by the large scale banking of animal blood. This might be accomplished by the organisation of ethical review panels within the regulatory bodies, blood banks and veterinary practices that oversee and monitor implementation of the new guidance. Stakeholder groups which include representatives from the veterinary profession, blood banking organisations and animal owners could meet to fulfil the requirements for stakeholder transparency and communication (provision 6.2). Empirical clinical and sociological research should be conducted to monitor and assess animal harms and benefits, and improve understanding of the perspectives of animal owners and veterinary professionals involved in the area. This will be discussed further in the concluding chapter.

The next section moves on to examine the current regulatory situation for feline renal transplantation in the UK and the potential implications of the animal donation ethical framework for this field.

7.5.2 Feline renal transplantation

As is the case with human living donation, the RCVS have asserted that a bright line separates the donation of regenerative and non-regenerative tissues by animals. At present, the donation of solid organs by animals is addressed under separate UK legislation. Chapter 4, however, argued that any living animal donation should be justified according to the same ethical and

legislative framework because the non-regeneration of tissue is not the greatest harm which some donor animals may experience.

This section again reviews the relevant legislation before exploring the implications of applying the animal donation ethical framework to this clinical area.

Current legislation

There is a turbulent history associated with the development of legislation concerning feline renal transplantation in the UK with legislation which supported the practice being implemented in 2003 and suspended in 2014. Live feline renal transplantation is practiced in several states in the US (Roudebush *et al.*, 2009) and the UK veterinary profession is currently engaged in debate about whether such practices should also occur in this country (Veterinary Record, 2016). The original RCVS guidance on renal transplantation in cats, which has been suspended pending a review, included the provisions detailed below:

> 27.23 The purpose of this supporting guidance is to safeguard the position of source and recipient animals involved in transplant procedures. It is the involvement of source animals which makes transplant procedures uniquely different in ethical terms from any other procedures.
>
> 27.25 The RCVS takes the view that the transplantation of kidneys in cats should be regarded as ethically acceptable in the United Kingdom, but only if carried out in accordance with the guidelines set out below.
>
> 27.27 The Home Office has accepted that kidney transplants in cats can be 'recognised veterinary practice' and, as such, exempt from the need for a Home Office licence under the Animals (Scientific Procedures) Act 1986. This is supported by Counsel's opinion sought jointly by the RCVS, the British Small Animal Veterinary Association

> and the Royal Society for the Prevention of Cruelty to Animals (RSPCA), (the "Legal Opinion").
>
> 27.28 The RSPCA has indicated that the removal of a major organ from a living source animal might constitute an offence under the Protection of Animals Act 1911 and this possibility is supported by the Legal Opinion. However, the RSPCA has indicated that the degree to which this RCVS advice is followed will "influence any decision the RSPCA might take in considering the likelihood of a prosecution relating to organ transplantation between animals." (RCVS, 2014b).

This suspended legislation appears again to allude to some of the ethical questions raised by living animal donation in a very oblique manner and even the very specific claim that such procedures are 'ethically acceptable' is not clearly justified or explained. The suspended legislation makes the point that whilst *transplants* may be a recognised veterinary procedure, the *sourcing* of a healthy organ creates a potential ethical problem. It is interesting to note that the term 'donation' is not applied in this legislation relating to solid organs, where the animal is termed the 'source', although the term 'donor' is used in the current RCVS legislation relating to the collection of animal blood (RCVS, 2016).

Since the suspension of this legislation the RCVS has reviewed its stance and a report in the Veterinary Record in 2016 outlined the progress which had been made (Veterinary Record, 2016). At the RCVS Council meeting in April 2016 the council reportedly stated that '*the use of a living donor in feline renal transplantation was not acceptable, but the use of a pre-euthanasia donor gave rise to further questions'* (p.332). At the meeting it is also reported that a suggestion was made for the council to rule that *'all transplantation of tissue was unacceptable unless the donor animal was dead'* (p.333). However, it was also pointed out '*that this could affect procedures such as blood transfusions, artificial insemination and embryo transfer'* (p.333). Ultimately the RCVS Council concluded *'we are moving to post-euthanasia donation only and if it's*

not feasible then it's not feasible, so it can't be done' (p.333). The RCVS standards committee are now considering the comments made by the Council before presenting further proposals at a later date.

It is particularly interesting that the connection between the living donation of solid tissue and the living donation of blood, gametes and embryos has been raised by the RCVS Council and this will be discussed further in the concluding chapter. It is also interesting to note that despite the significant issues surrounding the regulation of feline renal donation under the VSA, the potential for regulation under ASPA has not visibly been proposed, in spite of the existing connection between this legislation and the donation of companion animal blood.

Proposed regulatory approaches

Whilst official guidance remains suspended it is clear that the ethical issues surrounding living animal organ donation are being rigorously discussed in the UK. In line with the thesis assertion that no bright line should separate the ethical justification of the living animal donation of blood or solid tissue, the animal donation ethical framework can also be applied to the case of solid organ donation and the implications are identical to those outlined in section 7.5.1 above.

Because the animal donation ethical framework centres organ donation on the interests of the donor it makes justifiable cases of animal organ donation extremely rare. In the absence of any possible benefit associated with accessing banked tissue, it would only be likely to relate to an animal that was able to gain psychological benefits by donating an organ to a close companion. Again, it must be appreciated that A(SP)A does offer an alternative route for the justification of harmful donation procedures intended for wider benefit, and this appears in line with the approaches currently taken to feline organ donation in some other countries. The animal donation ethical framework would specifically *not* permit the use of shelter animals as donors, even if they were to be re-homed, due to the requirement

to treat donor and recipient as equals with respect to the identification of benefits (provision 5.5). It may well be argued that it would be simpler to prohibit animal organ donation altogether than to permit only very rare instances but such arguments have also been made in human healthcare:

> If it is in someone's interests to receive an organ, if it is in a child's interest to supply the organ, if it is in the family's interest that the transplant proceeds, and if the parents consent, taking the child's organ for transplant is morally permissible in principle. It is a further step to conclude that children should have their organs taken in practice. To allow organs to be taken would require adequate procedures to guard against mistakes and abuse. Some writers argue that each case should be decided in courts. Others argue for donor advocates within a transplant team. I have seen no reason to think procedures could never be adequate, so I conclude that organ donation by children should not be legally prohibited or automatically blocked by transplant teams (Wilkinson, 2011: p.143-144).

The benefit of permitting organ transplant only under such limited circumstances is that it would provide consistency between the legislative approaches to all living donations in animals, therefore supporting the professional assertion that donation practices are permissible only when they are in the donor's interest.

Very significantly, this use of the animal donation ethical framework also connects living animal organ donation with the proposals for pre-euthanasia or post-euthanasia animal organ donation. The misuse of the term 'euthanasia' by the veterinary profession has been previously raised (Ashall, 2014), unlike human medicine the death of an animal is very commonly controlled by veterinary professionals and their owners for a variety of reasons. As such, deceased animals will often have been intentionally killed and injured animals could feasibly be kept alive for donation in the knowledge that they may be killed afterwards. This means that even the options of pre-

or post-'euthanasia' animal organ donation, which are being considered, may impact upon end of life decision making for the donor animal and this must be considered a wider harm of the donation procedure. Since such animals are also not then in a position to benefit it would be very difficult to justify this type of donation in the interests of the donor.

7.6 Conclusion

This chapter first summarised the ethical and empirical findings of the thesis. It then illustrated how dominant ethical frameworks for human living donation embed critical ethical justifications within decision making tools that have influenced donation policy and practice worldwide. These frameworks were used as a template for the construction of an ethical framework for living animal donation. The proposed animal donation ethical framework utilises the comparative ethical analysis and novel empirical analysis to generate provisions relating to owner informed consent, recipient benefit, donor best interests, donor harm and benefits, fairness and transparency.

The second half of the chapter explored the implications of the animal donation ethical framework for UK legislation concerned with living animal donation. It outlined the existing legislation relating to the clinical areas of companion animal blood donation and feline renal transplantation. In the first case it was argued that the legislation is overly complex and lacks a robust ethical argument. In the second case, previous legislative guidance has been withdrawn and press reports indicate ongoing debate concerning the correct ethical approach to animal organ donation.

Finally, the proposed ethical framework was applied to both examples and used to outline a legislative approach to both animal blood donation and feline renal transplantation which is consistent with the ethical justification of human living donations through an adapted donor best interest argument. It was pointed out that the classification of harmful living animal donation as a research procedure is the only visible alternative. The regulatory proposals do represent a considerable change to current legislation in both clinical areas.

However, they do not rule out any living animal donation and therefore provide a more consistent approach which the UK veterinary profession may apply to any future developments in living animal donation going forward.

The next and final chapter reviews the thesis findings so far and discusses the broader implications of the work for human living donation, the veterinary profession, veterinary ethics, sociology and finally the potential for future research arising from the thesis.

8. THESIS CONCLUSIONS, WIDER IMPLICATIONS AND FURTHER RESEARCH.

This final chapter reviews the thesis conclusions and then considers the wider implications of the work and future research which might arise from it.

8.1 Thesis conclusions

This section describes how the thesis has responded to the three main research questions:

RQ1 To what extent can the ethical justifications for human living donation be applied to living animal donation?

The comparative ethical analysis has argued that the difference in purpose between human patient consent and animal owner consent, alongside the lack of capacity of animal donors means that equivalent informed consent justifications *cannot* be directly applied to living animal donations. However, donor best interest justifications can be adapted for living animal donation according to the premise that a veterinary surgeon's duty is to act in their patient's best interests. The best interest argument outweighs the authority of owner consent where donation practices are considered harmful. In essence, the ethical justifications for living human donation cannot be directly applied to living animal donation, but an adapted comparative justification may be made when living donation is in the animal's best interests and has the owner's informed consent.

RQ2 How does the different social context of veterinary donation inform or undermine the proposed ethical justifications?

The empirical analysis informed the proposed ethical justification in several ways; highlighting the need for specific information provision for owner consent to canine blood donation, a transparency rationale for public involvement in blood bank operational decision making and the significant responsibility role of the blood bank in maintaining trust between the public and the veterinary profession in this context. For the best interest justification of animal blood donation the empirical analysis also raised the critical

contextual finding that animal owners should not be relied upon to accurately perform the best interest test. Analysis of the donor owners' accounts highlighted a voluntary lack of understanding and the potential for conflicted interests, given the potential for significant psychological benefits for them. In essence, the empirical work has cast doubt on both the reliability and value of owner consent to living animal blood donation because owners appear to hold false expectations and have interests which may conflict with the animals' interests.

RQ3 What are the policy and wider implications of the research?

An ethical framework for living animal donation was constructed using the comparative ethical and empirical findings of the research. The proposed framework has detailed provisions for owner informed consent, recipient benefit, donor best interests, donor harm and benefits, fairness and transparency. The proposed framework was used to assess current regulatory approaches to companion animal blood donation and feline renal transplantation in the UK. Current regulation was reasoned to be unclear and lacking a consistent ethical rationale. Revised regulation under the VSA according to the donor's best interests was proposed as an alternative to reclassification of living animal donation as a scientific procedure under A(SP)A. This revised regulation would be likely to permit low risk blood donation to a blood bank which successfully provides blood products to all animals and direct blood or organ donation to save the life of a close companion only. The regulatory proposals represent a considerable change to current UK legislation in both examples but provide a consistent and clearly justifiable regulatory approach. The proposals do not rule out any living animal donation which can be justified according to the best interests of the donor.

The regulation of future UK living animal donation according to a clear ethical framework would have the very important effect of protecting both donor and recipient animal welfare. Furthermore, veterinary professionals would

benefit from increased clarity when making difficult clinical decisions in the field of donation. Whilst the regulatory changes proposed might be argued to limit current veterinary donation practices in some ways, it should be recognised that the framework allows for development of the field in other ways. For example, the increased focus on donor benefit would necessitate the development of improved systems for banking and accessing blood products and reducing wastage. In addition, the development of novel living donation practices is also enabled, provided they can be shown to be in the donor animal's interests.

The clear justification of living animal donation practices may be vital in explaining and managing international differences in regulatory approach. UK legislation is acknowledged to afford animals greater protection than that of some other countries, for example in animal research (Goodman *et al.*, 2015), and the formalisation of a best interests approach would extend this distinction to living animal donation. Alongside clarifying the basis upon which UK approaches are different to those of some other countries, the framework would also assist in managing any development in international trade of animal blood and tissue, which is already a reality in human medicine (WHO, 2010, ISBT, 2000). Regulators and policy makers would be able to clearly identify whether the practices employed in generating animal blood and tissues for export were in line with justifiable UK practices.

The thesis also has implications which reach beyond the field of veterinary donation and these wider findings will be discussed in the next sections.

8.2 Wider implications of the work

The wider implications of this work are now discussed, considering first the implications for human living donation, and then the veterinary profession and veterinary ethics more broadly, followed finally by the wider sociological implications.

8.2.1 Implications for human living donation

This work has wider implications for the ethical justification of living donation in both human and animal contexts. Here, the implications for terminology are first discussed, next the potential for extension of the novel empirical findings to the human medical setting is explored and finally a potential gap in current empirical work is highlighted.

Whilst use of the term 'volunteer' has been questioned in the context of living animal donations (Cox, 2007, Deluca *et al.*, 2006), the use of the term 'donation' for non-consenting patients has also been constructed as misleading in medical ethics literature (Van-Assche *et al.*, 2014, Machin and Cherkassky, 2016). Through identifying a comparative justification for living donation which extends between non-consenting human donors and non-consenting animal donors, this work is able to contribute to discussion over the ethical boundaries of the term 'donation'. The findings of this thesis are that living animal donations can be ethically justified in a way which is consistent with the justification of similar human donation practices, using an adapted donor best interest argument. Justifiable donation practices are not, therefore, always reliant upon a donor's consent. Chapter 3 highlighted that debate concerning the requirement for all human donors to benefit from their donation revolve around disagreement on the authority of donor consent (Spital, 2004), meaning that both consensual and non-consensual donations might be argued to be in the best interest of donors, where the donor's consent is considered sufficient to ensure adequate donor benefits (Price, 2000; Wilkinson, 2011). It is possible to conclude, therefore, that the term donation *can* be applied to both living animal donations and non-consensual human donations which are justified on the basis of donor best interest, as are consensual donations with valid consent. This finding negates the need to focus on the use of the term 'volunteer' in either setting since it is the beneficial nature of the procedure for the donor, rather than their voluntariness, which defines the practice. Donor voluntariness in the form of

assent or consent may instead be considered a necessary part of the best interest justification.

Chapter 5 has shown that empirical studies of human donation decision making have informed the ethical analysis of such procedures (Busby, 2010, Shaz *et al.*, 2009, Burnell *et al.*, 2015). However, it is also the case that much recent normative debate which concerns *third party* donation decision making, such as the use of incompetent or paediatric living donors has not been informed by specific empirical data analysis (Van-Assche *et al.*, 2014; Wilkinson, 2015; Taylor-Sands, 2015; Jackson, 2015; Gavaghan, 2015). It may well be the case that because such practices are currently uncommon in the medical field, robust empirical data analysis is difficult. Indeed, this comparative study might be argued to provide the only existing empirical analysis of third party living donation decision making, facilitated by the unique professional circumstances whereby *all* donation decisions made in the veterinary setting involve a third party. Whilst this study gains credibility by confirming that much of the existing medical sociological work on consensual living donation also applies in the veterinary setting, it also identifies novel sociological themes which appear particular to third party donation decision making (Ashall and Hobson-West, 2017). These themes have not previously been considered in the medical context and given the multi-layered connections which have been argued to exist both practically and socially between human and animal living donation, these novel themes may also prove to be of use in developing sociological and ethical understanding of third party human donation decision making.

An example of recent contemporary debate which has yet to benefit from empirical analysis is centred on the creation of 'saviour siblings' where traditional individualistic justifications for the selective creation and use of child donors (Wilkinson, 2015; Jackson, 2015) are being challenged by the proposal of a new relational model (Taylor-Sands, 2015). Ultimately, the debate appears focused not on *whether* but on *why* the creation of saviour siblings might be justifiable and Jackson (2015) asserts that regardless of

which ethical model is used to justify the intuition it is '*baffling to consider the possibility of choosing not to take any opportunity to save a sibling's life (p.929-30)'*. Jackson presents two interesting concepts; firstly that it is the *opportunity* to save a life, rather than the actual saving of a life which matters and secondly that this desire is *intuitive*. It is here that empirical work may add greatly to the discussion, and further, that the sociological analysis undertaken in this study might be able to direct future research and perhaps even provide tentative explanations for these observations. Firstly, the concept of family 'display' (Finch, 2007) which has not previously been applied in the context of donation was used in Chapter 5 to describe the psychological relational benefits that animal owners gained through the 'act' rather than the outcomes of the third party donation process. If this concept were shown to extend to the medical setting it may also indicate that relational benefits can be gained through the *process* of creating and using a sibling donor, regardless of the donation outcome. Family display may indicate that the decision to 'act' in the best interests of an existing child through creating a saviour sibling and transplanting their tissue provides such a positive opportunity for hope, family bonding and a visible display of the family's commitment to each other that the 'intuitive' decision to proceed is made by parents with little reference to the eventual outcome.

Furthermore, the second novel concept of the 'proxy donor' identified in Chapter 6 might also be reconsidered in the medical setting. This concept indicates that the positive feelings traditionally assumed to be associated with 'donation' can be separated from the physical act, and are transferred to a third party who is providing consent. In this study, guilt and obligation on the part of one individual who cannot provide a donation was alleviated if they were able to consent to donation on behalf of another individual. This concept may also warrant further exploration for its relevance in the medical setting. Aside from illustrating how significant empirical data analysis can be to the ethical analysis of third party donation decision making, these novel sociological concepts, although first identified in the veterinary setting, might

ultimately be proven to provide directly transferable arguments. This work highlights the importance of empirical work which focuses on the decision making parties, rather than the donor, where they are not the same individual. Existing empirical work appears limited to studies of consenting donors (Busby, 2010; Shaz *et al.*, 2009; Burnell *et al.*, 2015) and non-consenting donors (Garcia *et al.*, 2013) however, this thesis illustrates that empirical consideration of the consenting non-donor may also be necessary to challenge as well as support relational ethical approaches.

In summary, the wider implications of this work for living human donation include its contribution to clarifying the ethical boundaries of the term 'donation', the identification of unique sociological themes which may prove to be ethically relevant in the human medical setting and the identification of a significant living donation stakeholder who is absent in current empirical analysis of the human donation context. The next section considers the broader implications for the veterinary profession and veterinary ethics.

8.2.2 Implications for the veterinary profession and veterinary ethics

In this section several wider implications for the veterinary profession and veterinary ethics are discussed. The significance of increasing distance between stakeholders in contemporary veterinary practices is highlighted, the role of consent and fairness in veterinary ethics is raised, a best interest argument for veterinary procedures is proposed and initial progress made towards operationalising such a framework. Finally, a link between veterinary ethics and animal research ethics in the form of harm-benefit analysis is proposed.

The first broader outcome of this work for the veterinary profession relates to the assertion that living animal donation creates a potential for geographical and cognitive distance between a number of animal and human stakeholders who may be involved in the donation, banking and use of animal tissue. It was argued that this arrangement creates an environment where assumption, optimism, anthropomorphism and the pursuit of human benefit can thrive

because of a lack of genuine understanding and transparency between the numerous individual parties involved. This assertion led to the argument that specific measures are needed which promote transparency and communication and that high level policy decision making should include representation or advocacy for all stakeholder groups. Many other examples of modern veterinary care such as multi-centre veterinary hospitals, large commercial providers of veterinary care, specialist referral and the outsourcing of emergency care provision all create the potential for a similar 'diluting' of the role that individual animal owners and veterinary surgeons have in clinical decision making. Much as it has been recognised that the aims of the 1948 Veterinary Surgeons Act were to protect the veterinary surgeon's right to full professional discretion (Woods, 2013), the historical ideal of a veterinary surgeon making autonomous ethical judgements does not transfer to many of these modern day clinical settings. A thesis outcome may be that regulation outside the field of donation also needs to be updated (Hobson-West and Timmons, 2015) to reflect the complexities of modern day clinical decision making and to provide a route through which the multiple stakeholders involved can contribute to ethical clinical decision making.

A further significant and far reaching outcome of the work is its comparative ethical analysis of human patient and animal owner informed consent. It was argued that the difference in moral authority of patient consent in the human medical setting and an animal owner's informed consent to veterinary treatment may be clouded by efforts to improve the quality of veterinary consent thorough shared learning between the two professions. This work makes clear the ethical difference between a human patient's autonomous consent which is based on their right to bodily integrity and the third party consent of an animal owner which protects their property rights, thereby generating an outcome for veterinary ethics which applies to all veterinary interventions. Whilst informed consent may be the primary justification for the majority of human medical procedures, owner informed consent it is not

a sufficient ethical justification in itself for equivalent, or indeed any, veterinary procedures.

The empirical data analysis highlighted a potential ethical issue concerning the unequal treatment of different types of donor; whereas pet animals were offered as donors in the expectation that they may benefit from a blood transfusion one day, kennelled 'rescue' animal owners were reportedly influenced by the provision of free food and healthcare. Whilst there are several examples in society of the inconsistent treatment of animals of the same species (Joy, 2010; Rakhuyun, 2008; Gheaus, 2012), the thesis outcomes are based upon the assertion that veterinary professional's obligations are equivalent for all animals and the profession should not support the unequal justification of living animal donations. The identification of fairness as an important professional principle is certainly applicable to other areas of veterinary ethics.

Through starting to address the question of professional obligation perhaps the most significant thesis outcome is approached and that is the bold assertion that *veterinary procedures should be conducted in the best interests of the animal patient*. This assertion was made according to recent statements made by the UK Veterinary Profession's representative body the BVA, and the argument that it is the only logical interpretation of the RCVS code of conduct (Foster, 2016), in both cases this argument would apply to all veterinary procedures. However, significant literature was also identified which challenges the feasibility of such an approach due to the conflicted interests of animal, owners and veterinary professionals (Main, 2006; Corr, 2013; Fettman and Rollin, 2002). Because donation practices always involve a degree of physical harm this work serves as a particularly dramatic example of the complex responsibility challenges facing the veterinary professional (Hobson-West and Timmons, 2015) who must balance the interests of animals, owners and their business and yet, it is argued, should act in the best interests of animal patients. The thesis both illuminates the challenge of a best interests approach to veterinary medicine and develops some

preliminary approaches which may be significant in applying such a justification.

The work has generated a detailed empirical analysis of the intertwined and potentially conflicting interests between animals and their owners which are encountered in the donation context. By highlighting the scale of human benefit achieved by both the donation and use of canine blood this work adds significantly to existing work which identifies conflicts of interest between the veterinary professional, animal and owner as the fundamental question in veterinary ethics (Morgan, 2007). As such it adds weight to work which seeks to clarify the moral role of the veterinary professional (Fettman and Rollin, 2002), argues that professional guidance which claims an overriding duty to animal welfare is in tension with reality (Coffey, 2008) and that '*veterinary professionals require direction in the real world*' (McCulloch *et al.*, 2014p. 72).

The thesis also contributes to future work which may consider how best interest approaches may be accurately identified and implemented in the veterinary setting. A publication arising from the thesis discusses the complex owner motivations encountered in canine blood donation and considers separately the anticipated benefits to animals, shared benefits and human benefits (Ashall and Hobson- West, 2017). This model of analysis has not previously been encountered in work which seeks to clarify the potentially conflicted interests of animals and owners and so it may provide a starting point for future work which aims to bring greater clarity to the complex animal and human benefits veterinary procedures create (see section 8.4). Furthermore, the empirical analysis highlighted specific barriers to achieving best interest approaches such as the tendency of human owners to extrapolate their understanding of human healthcare to their animals. Veterinary ethicists may well be able to extend the important empirical finding that in spite of specific information provision, understandings of human healthcare are being extrapolated not just to the treatments which animal owners expect to access but also to their expectations for the patient's experience and the outcomes which they anticipate.

Finally, the thesis findings also have implications for perforating the boundaries which exist between academic consideration of the ethics of animal research and veterinary ethics. Through considering how well living animal donation practices fit within the definition of a veterinary procedure, an individual best interest justification is juxtaposed with scientific procedures which aim to benefit animals and humans on a wider scale, yet both justifications are shown to require an assessment of the balance of possible harms and benefits. In a veterinary procedure it is argued that the best interest test relates to harms and benefits experienced by one individual whereas the harm benefit analysis conducted for scientific procedures attempts to weigh the harms to research animals against wider societal benefits (Grimm, 2015). The reframing of veterinary procedures as procedures which are conducted in individual animal's best interests therefore creates opportunities to learn from the existing body of work concerned with harm-benefit analysis in the research setting (Laber *et al.*, 2016: Davies *et al*., 2016) whilst also clearly identifying how harm benefit analysis in the veterinary context should be different.

The research findings raise the importance of considering how current knowledge and practice in research ethics might usefully be applied to the case of living animal donation, perhaps through the creation of donation ethical review bodies, applying research consent procedures or even the application of the 3Rs of animal research to animal donation practices. Furthermore, if a best interest justification for veterinary procedures should become more widely advocated, this type of formal harm-benefit analysis could be extended to the ethical assessment of more routine veterinary practices.

In summary, this section has identified several wider implications for the veterinary profession and veterinary ethics including findings for the contemporary regulation of veterinary practices, owner informed consent, professional fairness, best interest justifications and harm-benefit analysis for

veterinary procedures. The next section considers the wider sociological implications of the work.

8.2.3 Wider sociological implications

This section identifies the wider implications of the thesis for veterinary sociology, medical sociology and the sociology of human-animal relationships. First the work's significance in forging a link between human and veterinary sociology is discussed before the identification of specific novel themes is highlighted. Finally a contribution to the sociology of human-animal relationships is outlined.

The field of veterinary sociology is very underdeveloped although some work is now starting to emerge which explores the social complexity of the veterinary clinical encounter (Morris, 2012; Christley and Perkins, 2010; Hobson-West and Timmons, 2015). As such the empirical study conducted within this thesis adds significantly to the nascent field of veterinary sociology. A central finding of the work is that sociological themes which are recognised as important in the field of human donation are also identified in the accounts of owners donating blood from their animals. It was argued that the intensity of the human animal bond and the framing of pets as non-human 'kin' (Charles, 2015) enabled sociological understandings of human donation practices to be extended to companion animals. A major and far reaching outcome from this work is therefore that it forges a link between the sociology of medicine and the sociology of veterinary treatment. It is highly likely that the kinship relationship also enables the extension of sociological understandings of other healthcare practices from human medicine to the veterinary setting. This work should encourage future veterinary sociologists to critically evaluate existing human medical sociological knowledge when designing empirical studies, analysing data and drawing conclusions for the field. There exists a wealth of human medical sociological knowledge which could be explored for its veterinary significance and similar comparative studies of other ethically charged clinical areas such as euthanasia and abortion might illuminate further transference of sociological themes which

also have important ethical significance. The identification of a clear link between the sociology of human medicine and animal medicine also has relevance for the human medical field, as was discussed in the previous section on living donation. The thesis findings therefore showcase the potential of research which values the connections between human and animal health for developing sociological understanding of human healthcare. Furthermore, this work opens up the veterinary setting as an empirical location worthy of medical sociological analysis.

The specific motivations identified for canine blood donation also extended beyond those identified for human donors and included novel themes which have not previously been discussed in sociological literature. Aside from the ethical implications already discussed, the novel empirical findings may have implications for the sociology of human healthcare in their own right. For example, that the psychological benefits which have been identified for human blood and tissue donors, such as increased self-worth or alleviation of obligation, appear to be experienced by those consenting to a donation from their pets creates a potential for individuals to choose to offer a pet for donation *instead* of donating themselves. Whilst veterinary donation is an emerging field, sociologists of donation will now need to ensure that future work is sufficiently open to capture such complexities.

The empirical analysis also clearly identified broader sociological themes within accounts of veterinary donation decision making including trust, optimism, human-animal comparison and guilt. Because the field of veterinary sociology is so underdeveloped these themes have not yet been explored for their role in decision making in other clinical contexts or in the veterinary setting more generally. This work therefore serves as a significant starting point for a greater understanding of the sociological underpinnings of veterinary interventions.

The empirical data analysis arising from the veterinary professionals' accounts provided an interesting but limited insight into the rationale behind the

transfusion of donated animal blood and outlined the complex reasons why animal blood transfusions may be performed. The role of sick animal owners in requesting animal transfusion and their reasoning demands much greater exploration through additional qualitative research but the limited analysis of veterinary professionals' perspectives constructed animal transfusion as something which may sometimes be led by the demands or needs of the animal's owner. This connects significantly with a reported societal concern surrounding animal kidney transplantation which was raised in the introduction:

> Other commentators said it was 'frivolous' and 'distasteful' to be discussing kidney transplants for cats when hundreds of human patients die each year while waiting for replacement organs. (Chapman, 2005)

Should veterinary transplants develop into a practice which is demand led, this could create an inflammatory contrast with human transplant which is generally constrained by availability. The empirical analysis points to a need to further consider the sociological rationale behind the *use* of donated animal tissue as one example of advanced and innovative veterinary treatment.

Finally, the thesis findings also add to the growing body of work which explores the complex sociological meaning of human non-human animal relationships. This study is useful in supporting those models which stress the simultaneous role of pets as both companions and possessions (Fox, 2006; Charles, 2015). In this work, the animal appears even more complex, being at once a potential patient, a loved family member, and a route through which a form of health citizenship is achieved. This latter argument necessitates further conceptual work and should encourage much more attention to animal medicine as an important site where interspecies relationships are made and displayed, and where human-animal boundaries are potentially transgressed (Ryan and Ziebland, 2015). Further work could also re-examine

canine blood donation from the point of view of animal subjectivity, or the human-animal hybrid (Haraway, 2007). However, the thesis particularly highlights the importance of retaining division and difference in sociological understanding of the human-animal bond (Latimer, 2013), therefore allowing space for a normative critique of the benefits (or otherwise) for animals of such technological innovations.

In summary, the wider sociological outcomes of this thesis include the identification of human medical sociological themes within the veterinary setting and the creation of a previously unexplored link between empirical and theoretical human and animal medical sociology. The identification of the novel sociological themes of interspecies kinship display and proxy veterinary decision making also have implications for human medical sociology and the broader veterinary setting. Wider sociological themes such as trust, optimism, human-animal comparison and guilt may also provide a foundation for further veterinary sociological work. The work identifies a need for future work which explores empirically pet owners' accounts of veterinary treatment, in particular exploring their role in driving the application of innovative veterinary practices. Finally, this work adds support to complex sociological models of the human-animal bond rather than the traditional hybridity model. In the next section the methodological implications of this work are outlined.

8.3 Implications for research methodology

This work has developed methodological approaches which are novel in several ways.

Firstly the empirical study, although conducted in the veterinary setting, has generated conclusions which relate to both human and animal health. Whilst the sociology of medicine has recently begun to explore the sociological links between human and animal health (Ryan and Ziebland 2015) there is no previous published work in human medical sociology which draws conclusions from veterinary sociological data analysis. A publication arising from this

research (Ashall and Hobson-West, 2017) therefore represents the first work of its kind which takes an interspecies approach to medical sociology. By setting a precedent for this type of interspecies approach the work has opened up the possibility for researchers to explore any aspect of comparative healthcare in this way. It is hoped, therefore, that this work will be shown to have had significant methodological impact for the fields of human and animal medical sociology.

More specifically, the empirical research adds to a growing interest in using qualitative methods in the veterinary context (Christley and Perkins, 2010; Cake *et al*. 2017). Methodologically the research has shown that qualitative methods can generate significant and far reaching outcomes and that a veterinary surgeon, once trained in empirical methods, is able to conduct robust empirical research in their own field. The problem orientated approach and outputs from this research are directly attributed to my clinical background in the field. Qualitative research which is conducted from within the profession has therefore proven to be particularly valuable for grounding empirical research in lived reality.

Secondly, for the field of veterinary ethics, this work takes a unique approach through its systematic comparative ethical analysis of a clinical procedure which is performed in both the human and animal medical settings. There is very little work which compares the ethical justifications for comparative human and animal medical practices, with existing approaches being limited to ethical analysis of the roles of human and animal medical professionals in specific contexts (Campbell, 2013). By deconstructing the ethical justifications for human living donation and adapting or applying the underpinning theory and principles to the veterinary setting this work has generated a justificatory framework for animal donation which is consistent with justifications for aligned human practices. Given the wider context of veterinary technological innovation, shared learning between the professions and societal construction of pets as important family members (Charles, 2015), it is very likely that such an approach could also be applied to other examples of

analogous clinical procedures. This work should therefore be recognised as having developed an innovative approach to the comparative ethical analysis of human and animal medical procedures. For the education of future veterinary ethicists the relevance of human medical ethics should not be underestimated. The field of human medical ethics should be valued by the veterinary profession not only as an academic learning destination which can provide a solid foundation of knowledge in clinical ethical analysis, but also as the first stage in this type of comparative ethical analysis.

In summary this work has significant methodological implications for the development of the fields of interspecies sociology, veterinary qualitative research and comparative ethical analysis. Finally the next section considers the significant further research which may follow this work.

8.4 Further research

This thesis has conclusions for several academic areas, highlighting the need for further research in a number of fields. However, the challenges associated with funding, supervising and publishing innovative work similar to that undertaken here, which were raised in the introductory and methods chapters, must again be acknowledged.

In the field of veterinary donation this work has identified a need for further empirical research which focuses on the *use* rather than *donation* of living animal tissue. The role of animal owners in driving veterinary treatment is currently unexplored and a wider sociological analysis of veterinary decision making may also help to develop understanding of the roles of power and authority in the veterinary setting. In addition, wider clinical practices such as the collection of animal gametes and embryos which are not currently termed 'donation' in the veterinary setting could also be explored in a comparative manner, potentially opening up further differences in professional roles and societal meanings, through examining comparative clinical procedures where animal benefit may be more difficult to identify. In addition to extending the scope of empirical research in the field of donation, future analysis could also

re-examine canine blood donation from a different theoretical perspective such as animal subjectivity, or the human-animal hybrid (Haraway, 2007). This thesis, whilst concerned with living animal donation generally, has been dominated by data relating to dogs. This species also dominate literature concerned with the human animal bond (Miller, 2009; Odendaal and Meintjes, 2003; Coppola *et al.* 2003), and future research might consider focusing on a different companion species, and potentially reducing the significance of the 'kinship' relationship. Whilst this thesis takes a realist ontological perspective (Bryman, 2012), more constructivist analysis of this topic (Dingwall, 1997) might also yield different sociological perspectives.

For sociological research the identification of a link between human and animal medical sociology creates enormous potential for comparative research in all areas. The concept of interspecies sociology creates a whole new field of research and sociologists interested in the human-animal bond may also like to make greater use of healthcare settings to further develop their work. This work may lead to further exploration of specific social themes in both the human and animal medical contexts. For example the themes of trust, optimism, human-animal comparison and guilt should all be explored for their wider significance in the veterinary (and human medicine) settings.

For human medical sociology, future work could explore whether the entanglement of human and animal healthcare decisions also applies to other (more mundane) domains of contemporary clinical practice, which may have been overlooked due to the power of the disciplinary 'species barrier' (Charles 2015). Specifically the findings of this work might raise difficult questions concerning how 'medical guilt' is experienced and managed or how the ideal of family is socially enacted in the human medical setting. Finch (2007) argues that further empirical work is needed to investigate precisely how people convey family and this study is the first of its kind to show how the concept of family display can be applied in the veterinary setting, highlighting a potential for work which explores the concept in the human medical setting also. With regards to living human donation, medical

sociologists and medical ethicists may wish to explore the relevance of the novel themes of 'display' and proxy donation in the human context and also to consider the influence the development of animal donation practices may have on human donation. This work has highlighted a gap in empirical work which considers consenting non-donors in the human field. Furthermore, the sociological and ethical meanings of the terms donation and donor are deserving of much greater analysis. The veterinary use of human medical terminology may also be a fruitful area for sociological research with potential implications for both professional settings

For the nascent field of veterinary sociology the concept of 'family display' (Finch, 2007) has not previously been considered in the veterinary setting and a desire to give social reality to human-animal relationships through the shared experience of a clinical encounter may well be worthy of research in other veterinary scenarios. For example the role of 'display' in veterinary treatment may offer a theoretical framework through which to study the 'overtreatment' of companion animals, a scenario which has already been embedded in a reluctance to relinquish an intense human-animal bond (Yeates and Main, 2011). The possibility that continuing veterinary treatments and interactions in the veterinary setting might hold appeal because of what they imply and display about the human-animal bond, rather than what they may be expected to achieve clinically has not previously been considered. The sociological theme of proxy benefit is also novel and again may have significance in other clinical areas. Whilst the specific psychological benefits of donation may not extend to the therapeutic treatment of animals the broad concept of humans benefitting from veterinary encounters in ways which make up for perceived failings or frustrations might well be transferrable to other studies. For example owners might use veterinary treatment as a route to feeling more positive about having neglected their own heath or that of a family member, or to strengthen their commitments for or against particular clinical interventions such as vaccination or euthanasia. The concept of animals as proxies through which humans can benefit psychologically through

making significant healthcare decisions is a potentially powerful finding of this work for future research in both animal and human medical sociology. Furthermore, a fuller understanding of the rationale behind companion animal veterinary decision making could even result in innovative approaches to managing problematic clinical scenarios.

For veterinary ethics research the emergence of empirical ethical approaches offers great opportunity for future work. Future research which explores the ethical implications of extending different human healthcare practices to animals may have equal impact and further work is also needed which develops the thesis findings regarding the limitations, tensions and practical complexities of veterinary informed consent. An area with enormous potential for study is that of the conflicts of interest which exist between stakeholders in the veterinary setting and the undefined moral role of the veterinary surgeon. This work has explored the benefits and challenges associated with extending a patient best interests approach to veterinary living donation and further work could now examine the significance of such an approach to other veterinary encounters. There is also considerable opportunity for developing practical approaches to ethical decision making in the modern day veterinary setting. For example, further work may extend the harm-benefit analysis detailed in this work which is here used to support the best interest argument and which may develop into a valuable link between the tools used in animal research ethics and veterinary ethics.

This thesis ends with a reflection on the assertion made here and recently by the BVA that a veterinary surgeon should act according to the best interest of their animal patients. To regulate for such a duty in the UK may necessitate amending the currently ambiguous RCVS Code of professional conduct, which currently promotes an animal health and welfare priority, perhaps to:

> *" I PROMISE AND SOLEMNLY DECLARE that I will pursue the work of my profession with integrity and accept my responsibilities to the public, my clients, the profession and the Royal College of Veterinary*

Surgeons, and that, ABOVE ALL, my constant endeavour will be to ensure the ***BEST INTEREST*** *of animals committed to my care."*

This work has shown the benefits to living donor animals that such a seemingly simple change would bring, through revised regulation of harmful veterinary procedures. However, it has also illuminated the scale of change which would result for veterinary professionals, animal owners and society who may all currently be charged, at times, with acting against animals' best interests. According to the findings of the thesis, to implement such a change might necessitate a revision of the legal status of animals and perhaps even the implementation of elements of an animal National Health Service, with respect to the fair and equal treatment of all animals.

The veterinary profession appear to be approaching an impasse where innovation and technology are forcing the question of what a veterinary procedure should aim to achieve. Reversing society's long held expectations of the profession by reframing veterinary procedures in the animal's interests may well be difficult. However, a profession who accepts, instead, that it *does not* act in the best interests of animals, may be faced with even more difficult challenges.

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APPENDIX 1 – INTERVIEW PARTICIPANT INFORMATION SHEET

Companion animal blood and organ donation research project

Information for Interview Participants

Researcher *– Vanessa Ashall*

Dear pet owner or veterinary surgeon,

I am a PhD student in the school of Veterinary Medicine and Science at the University of Nottingham. I am also a qualified veterinary surgeon who has previously worked for a pet blood bank. I am now undertaking an independent research project which aims to learn more about the donation and use of companion animal blood and tissues. This project will involve me speaking to many different people including pet owners, vets, blood bank staff and governing bodies such as the Royal College of Veterinary Surgeons.

This project will use interviews to collect information on what individuals have to say about their experiences. There is no right or wrong answer and all interview data will be anonymised. I intend to use the information I gather to write my PhD thesis and publications. I also hope that some of the outcomes may be useful to policy-makers who decide how such practices should be organised and regulated.

The only request of participants is their time in speaking to me. I anticipate that this will take anything from 10 minutes to one hour depending upon the time available and how much you feel you have to say. I am happy to meet you in person or speak on the telephone if this is easier. Involvement in this project is completely voluntary and participants are free to change their mind about participating at any time.

This project has been approved by the ethics committee at Nottingham University School of Veterinary Medicine and Science and it is funded by the independent medical research charity, The Wellcome Trust. I have provided below contact details for myself and my supervisor. Please get in touch with me if you are able to spare me some time and feel free to ask me any questions you may have at any time.

Vanessa Ashall

Contact details

Researcher: Vanessa Ashall- vanessa.ashall@nottingham.ac.uk

Supervisor: Pru Hobson-West- pru.hobson-west@nottingham.ac.uk

APPENDIX 2 – INTERVIEW CONSENT FORM

Participant Consent Form

Companion animal blood and organ donation

In signing this consent form I confirm that:

- I have read the Participant Information Sheet and the nature and purpose of the research project has been explained to me.

- I have had the opportunity to ask questions.
- I understand that my participation is voluntary and I may withdraw from the research project at any stage, without having to give any reason and withdrawing will not penalise or disadvantaged me in any way.
- I understand that while information gained during the study may be published, any information I provide is confidential (with one exception – see below), and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be published.
- I understand that the researcher may be required to report to the authorities any significant harm to a child/young person (up to the age of 18 years) that he/she becomes aware of during the research. I agree that such harm may violate the principle of confidentiality.

- I agree that extracts from the interview may be anonymously quoted in any report or publication arising from the research

- I understand that the interview will be recorded using an electronic voice recorder

- I understand that data will be securely stored
- I understand that I may contact the researcher [or supervisor] if I require further information about the research, and that I may contact the Ethics Committee chair, David Haig, SVMS, University of Nottingham, if I wish to make a complaint relating to my involvement in the research.

I agree to take part in the above research project. Yes ☐ No ☐

Participant's name (BLOCK CAPITAL)	Participant's signature	Date
Researcher's name (BLOCK CAPITAL)	Researcher's signature	Date

APPENDIX 3 – INTERVIEW SCHEDULE

Interview topic guide – pet owners

Background information

Owners of animals who donate to Pet Blood Bank, Vet Blood, Veterinary Tissue Bank and private veterinary surgeries will be interviewed (including cats).

- Owners of different 'types' of animals e.g. pets, working animals, greyhounds etc.
- Owners who are or are not also human donors.
- Interviews will be recorded and transcribed.
- Data will be anonymised and securely stored.
- I will allow the interviewees to lead the interview as much as possible. This topic guide is to help me steer towards the areas I would like to discuss if necessary. Each topic has one main question which may be sufficient to allow interviewees to fully explore the area. I have included additional prompts in case they are needed.

INTERVIEW

Opening remarks

I will provide an overview of the project and an introduction to myself. Interviewees will be provided with a written information sheet and consent form.

INTRODUCTION

Aim: To find out about the pet and the owner, this will start the conversation and provide information which will highlight the different types of animals and owners which are involved.

Q- Please can you tell me a little about the pet you have brought today?

Q – Can you tell me about other pets in your household?

Q- Please can you describe a typical day for your pet?

Justification

Aim: To allow owners to talk about their own justifications for pet blood donation.

Q- Can you tell me why you think donation is important?

Q- Are there any situations where it would not be a good idea?

Q- Who is responsible for deciding whether your pet should donate?

Q- Have you always held the same view?

Q –Are you aware of any different views?

Motivation

Aim: To find out what encourages or motivates individual owners to come.

Q- Can you please explain how you came to be here today?

Q- How did you originally find out that your pet could donate?

Q- Are there any benefits for you in bringing your pet to donate?

Q- What would you miss if you could not come any longer?

Human donor status

Aim: I will record whether comparisons with human donations are made without any prompting before I ask if they are a blood donor themselves.

Q- Are you a blood donor yourself or have you received blood?

Q – Has being/not being a blood donor yourself influenced your decision to come?

Q – Can you see similarities with a human donation?

Q – Can you think of any differences?

Understanding/expectations

Aim: To enable interviewees to describe what they know of blood processing, research and allocation etc.

Q- Do you have any sense of what happens to the blood after it is donated?

Q- What do you think the blood might be used for?

Q -Can you think of any other possible uses?

Q- How are blood products accessed?

Other tissues/organs

Aim: to think about wider uses/types of tissue and organ donation

Q- In other countries, pets can donate organs for example kidneys. Would you consider allowing your pet to donate organs or tissues?

Q – How would you decide what is acceptable?

Q- What about donations taken after a pet is deceased?

Closing remarks

Q- Is there anything else you would like to discuss about pet blood donation that I haven't mentioned?

- I will offer thanks and confirm contact details in case of questions.
- I will provide a small gratuity.

APPENDIX 4 – PUBLICATIONS, PRESENTATIONS AND AWARDS

PUBLICATIONS

- Ashall, V. & Hobson-West, P. (2017) 'Doing good by proxy': Human-animal kinship and the 'donation' of canine blood. *Sociology of Health and Illness* (published online-first) doi:10.1111/1467-9566.12534
- Ashall, V. Blood transfusion *in* Mullan S. and Fawcett A. (2017) *Textbook of Veterinary Ethics.* CABI (forthcoming)
- Ashall, V., Millar K. & Hobson-West P. (2016) Veterinary Informed Consent: implications for the profession and the animal 'patient' *Journal of Agricultural and Food Ethics* (accepted with minor revisions)
- Ashall, V. (2014) Everyday Ethics: Euthanasia in a no kill shelter *In Practice* 36:478-479
- Ashall, V. (2014) Vet Record Careers: Engaged with ethics. *Veterinary Record* 175:i-ii

PRESENTATIONS

- Ashall V. Hobson-West P. (May 2016) *Veterinary 'donation': ethical implications of applying best- interests arguments in animal medicine* International Association of Bioethics Conference. Edinburgh
- Ashall V. (May 2016) *Applying human medicine to companion animals: ethical and social challenges in veterinary 'donation'* Vethics Conference Utrecht University
- Ashall V. (May 2016) *Applying human medicine to companion animals: ethical and social challenges in veterinary 'donation'* Colorado State University Veterinary Teaching Hospital USA
- Ashall V and Hobson-West P. (Sept 2015) *Saving lives by proxy* British Sociology Association Medical Sociology Conference. York University
- Ashall V. (June 2015) *Saving lives by proxy: why do dog owners donate their pets' blood?* University of Nottingham Research Showcase

- Ashall V. (December 2014) *What donation means to me: canine blood donation* Deconstructing donation conference Lancaster University
- Hobson-West, P. Ashall, V. (March 2014) *Ethics and society: Perspectives on companion animal blood and organ donation* Animal Welfare Science Ethics and Law Veterinary Association Conference. University of Nottingham
- Ashall, V. (February 2014) *Canine and feline blood donation in the UK* BVA Ethics and Welfare Group, London

FUNDING, AWARDS AND OUTREACH

- Wellcome Trust Clinical Fellowship in Ethics and Society (2013-2016)
- University of Nottingham Research Showcase 2015 – First Prize.
- European Specialist in Animal Welfare Science, Ethics and Law – De Facto Diplomate status awarded May 2016 by European College of Animal Welfare and Behavioural Medicine (ECAWBM) http://www.ecawbm.com/diplomates-2/
- Outreach – YouTube video abstract 'Doing good by proxy' https://www.youtube.com/watch?v=rBKpGpi17Q8
- Outreach – Radio interviews, BBC Radio Nottingham (15-02-17), GEM 106 (20-02-17)

PUBLICATIONS ARISING FROM THE THESIS