Veterinary Students and Identity Construction

The Role of Power, Ethics and Animal Experimentation Among Students at the Norwegian School of Veterinary Science

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Human beings do not construct the world in a certain way by virtue of what they are, but by virtue of their own conceptions of the possibilities of being.

(Tim Ingold, 2000: 177)
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Preface

: inspiration and background - the author’s point of view

Different ideas exist on how human beings relate to non-human animals, and on how we make room for other creatures in “our” world. In view of the frequent disparity that exists between people’s attitudes to animal welfare and their actual pattern of behaviour, it is of particular interest in the present thesis to explore the relationships and the attitudes to animals that are being shaped throughout the education of veterinary students at the Norwegian School of Veterinary Science (NVH).

Veterinary students are likely to have a loving relationship to (some?) animals prior to their education, however a challenge of values may occur when faced with some of the requirements of conducting experiments on animals. It is important to emphasize that my intention with this study is not to examine “animal exploitation” in a moralistic or a political fashion. I do not have an underlying agenda except for the desire to explore the intricate and complex process of the identity construction of veterinary students in relations to animals.

The prelude of the project started early fall of 2004 at Vitenskapsbutikken\(^1\) at the Faculty of Social Sciences in Oslo, where Dyrevernalliansen\(^2\) (The Norwegian Animal Welfare Alliance) had made a request for master’s students to do a project on medical scientists’ attitudes towards animals as scientific objects. I found the project intriguing, and I decided to read up on the subject since I did not really have any background knowledge. From previous anthropological studies I have learned how intertwined humans can live with the “natural world” other parts of the planet. Animals have historically, especially among indigenous people, provided metaphorical categories for humans to arrange their worlds, and animals have often been appraised as kings and rulers of the earth. This certainty seemed, however, remote from the urban reality of the Norwegian School of Veterinary Science, even

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\(^1\) Vitenskapsbutikken serves as a link between students and professional life. Vitenskapsbutikken receives thesis assignments by external institutions in order to try to incorporate students with institutions outside the University.

\(^2\) To get a complete insight into the Norwegian Animal Welfare Alliance’ agenda: URL: [http://www.dyrevernalliansen.org](http://www.dyrevernalliansen.org).
though I would later learn that animals also have a great symbolic and conceptual value in the everyday life of people in the West. The fact is that all human societies have diverse, multifaceted and often-contradictory views towards the natural world (Morris 1998: 2), and this will be one of the underlying sentiments of the present project.

The Norwegian Animal Welfare Alliance has not been involved in the progress of the project, except for providing some general information on the field of laboratory animal science. I also decided to change the objectives of the project from the initial focus on established researchers and their attitudes towards animals as scientific objects, to be about veterinary students. I hope the study will provide insight into changing attitudes and identities among individuals that primarily aim to help, nurse and care for animals. The special position craves a deeper understanding on how or if the use of animals in education – particularly in terms of experiments – generate a construction of identity and a change in attitudes. The study hope to reflect in the best way possible, an in depth and viable research composition of the veterinary students at the NVH in Oslo, and try to examine how the students include and exclude animals from their moral and social world, and that how the students describe animals are indicative of how they see themselves.

The fact that the field of animal experimentation and veterinary education was more or less unfamiliar to me, I believe, has enabled me to approach it with unstained, open eyes, and to be open for inputs from every angle. I have had many inspiring minutes, hours and days researching and contemplating on the questions posed in the thesis; questions that are not accompanied with any singular answers. As the thesis is released to the reader to make your own interpretations and judgements, I hope you will find the analysis and argumentation viable, rigid and intriguing, and useful for further enquiry.
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Finally, eternal gratitude to my informants for your thoughts, feelings and stories, making the project what it is.
1 Objective and Methods

1.1 Project Objective

The aim of this project is two-fold. The first aim is to examine how students at the Norwegian School of Veterinary Science (NVH) shape their identity\(^1\) and attitudes to animals and animal experimentation in the course of their education. At the outset of the project I started with a working hypothesis that stated that students do change their attitudes towards the animals they are introduced to during their time of study, and that direct or indirect participation in animal experimentation has a central place in this transformation. After conducting several interviews with students at different levels of the education, I also found that the “rules of conduct”\(^2\) given, directly or indirectly, by the school as an institution, play a major part in the proposed changes. I will thus make a claim in the project that areas within which the students interact – the school, practice periods and part-time jobs with an educational agenda, and the social structures and cultural sentiments at large – are influential in some way or another on how the students construct their identity and their attitudes toward animals. I will argue later in the thesis on the prominent presence of power relations and the crucial position of discourses in the change of social practice and identity construction, and try to apply discourse analysis, as well as the overall theoretical framework, in order to identify attitude and identity changes. The change in student attitudes is expected to be from a non-instrumental attitude of moral respect to a

\(^{1}\) The concepts “identity”/“identities” will be extensively discussed and defined in chapter 2. For the present, it is important to emphasize that the concepts hold the same connotations. If the term is used in a plural form, I am not suggesting any type of essentialism, because: “One’s identity – one’s identities, indeed, for who we are is always singular and plural – is never a final or settled matter”. It is an internal-external dialectic of identification (Jenkins 2004: 5).

\(^{2}\) “Rules of conduct” is a concept borrowed from Foucault (1972, 1984). Mark J. Smith has defined the concept cleverly by seeing it as part of discourse. Discourse is a system of representation made up of rules of conduct, established texts and institutions which regulate what meanings can and cannot be produced, and consequently, structure the way we perceive reality (1998: 254). In the present thesis, the “rules of conduct” will indicate both manifested and unwritten laws provided by the NVH, and which structure how the veterinary students’ perceive “reality”. Foucault and the concepts of discourse, power and knowledge will be extensively defined in upcoming sections.
more instrumental attitude where distance and desensitisation is created. The effect of this change in attitudes is expected to be that animals are revaluated and given a more instrumental identity. It is important, however, to recognize that identity is in a constant flux, thus, it does not exist any rigid and clear-cut identity ready to be consigned to the students.

The second aim of the project is to explore how or to what extent ethics plays a part in determining possible changes in attitudes, and also to examine how or if ethics help constitute the student’s identity when interacting with animals. I want to examine to what degree students are exposed to ethical dilemmas in their interaction with animals, and how or if this is part of their educational curriculum. The aim of this part of the project is to see if this is an influential component of the identity construction and the shaping of attitudes towards animals. It is also interesting to see how the school as an institution informs the students with different ethical perspectives on human-animal relationship, and the values and morals that are part of it. It is important to look at ethics with regard to how attitudes are shaped and how identity is constructed; as for some of the students the use of animals, in certain ways, in education, might create moral and ethical dilemmas, and even to some degrees an “identity crisis”.

It is imperative to recognise that I do not have any moral or political agenda in conducting this research: It is not a thesis about animal rights and human wrongs, although the moral status of animals and the paradoxes of animals’ position within human society are important to question. In the present I am however more concerned with exploring the human-animal relationship from a perspective reflecting that identity construction is relational and that how humans relate to animals can be indicative of how we see ourselves. How veterinary students construct their identity and attitudes will be evident by exploring the different interactions that are present during the course of their education. The interactions can be with fellow students, with professors, with other veterinarians, with the different animals used for educational purposes, and reactions from the social environment at large. I will highlight these interactions, as I see them as important features and points of reference in the social processes I want to examine.
1.2 Previous Studies

One of the major obstacles of conducting this research has been to make sense of the information, or the lack of it, which is already “out there”. Naturally I have not been able to track down every single research done on the topic of human-animal relationships, or more specifically, veterinary students and their relationship to animals. However, I see myself fit to state that the need for such a study as the current one is critical.

The studies I have found, while searching library databases and internet websites, have been either socio-psychological studies of the psychological effects of students interacting with and experimenting on animals, philosophical reflections and abstractions of values and ethics with regard to human-animal relationships, historical accounts of human-animal relations, and highly quantitative surveys on both a national and transnational level. I am not trying to discredit any of these studies – I am using several of them (especially philosophical reflections and abstractions, and historical accounts) as points of reference; I rather see them as insufficient in explaining and conveying an in-depth account of how and in what way the students interact with animals, and how, why or if this affect identity construction. In spite of the insufficiency, I still want to review some of the research done on similar topics to give the reader an overall idea of what is to be found “out there”, as well as to give an indication of contemporary views on animals.

Pifer, Pifer and Shimizu (1994) have conducted a transnational study of public attitudes toward animal research in fifteen different nations. The study is a secondary analysis of data from surveys as well as telephone interviews, and is presented in statistical form with numbers and percentages. The study, in short, implies that gender is a clear variable in attitudes toward animal research, in the sense that women generally oppose animal research more than men. This is, however, a highly generalised statement, and because of the practical constraints and the relevance of this study to the present one I will not pursue this any further.

Another, more related study, has been conducted by Hagelin, Hau and Carlsson (2000) at the Department of Physiology at Uppsala University in Sweden, on attitudes of Swedish veterinary and medical students to animal experimentation. They found that nearly all veterinary and medical students (94 %) saw it as morally
acceptable to use animals in research and believed it to be necessary in order to treat human diseases. In spite of this, a substantial proportion of veterinary students (40%) considered themselves as animal rights activists. Another interesting fact was that a higher proportion of the students who had not been through the course of laboratory animal medicine were opposed to the use of animals in research than of the students who had completed the course. Thus, the views on animal research became modified as a result of this course. This research was also conducted as a survey investigation, and can consequently not be comprehensive enough to say something about “why” these changes really occurred.

The same can be said about the research done by Paul and Podberscek at the Department of Psychology at the University of Edinburgh in Scotland (2000). They handed out questionnaires designed to assess the attitudes of veterinary students at two British universities in their first preclinical, first clinical and final years of study. The aim was to map the students’ attitudes toward animal welfare. The attitudes were divided into two constituent components: emotional (emotional empathy with animals) and cognitive (belief in the sentience of animals). The findings reflected a gender division, as in the first research reviewed above, where the female students rated themselves as having significantly higher level of emotional empathy. In addition, they could recognize that the level of empathy decreased from the first years of study to the last years, which again, was more evident among the male students than the female students.

These findings are interesting and can to a certain degree be used as comparative analysis in the present project. However as mentioned, the methodological approach to these studies does not provide an extensive enough account of “why” and “how”. The homogenisation and generalisation of the individuals participating in the different studies cannot be representative in the sense I feel is sufficient. This will be evident in the upcoming presentation of the methodological approach of this project. First I will present the body and structure of the thesis, to introduce the reader to its contents.
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1.3 Body and Structure

The thesis is divided in six chapters, all with the purpose of providing an in-depth insight into the role of animal experimentation, ethics and power in the everyday social practice of the veterinary students. The division of the chapters and sections have both a practical and analytical purpose. It has been important to make room for different insights both in a historical, a conceptual and a narrative perspective. It might be difficult at times to follow the underlying principle of the sections, as I am compelled to embark on some detours in order to provide a satisfactory examination of the project objective. Nonetheless, each section is conducted with the aim of providing the reader with a sufficient underpinning and understanding of the complexities of the issue at hand.

Chapter 1 introduces the reader to the methodologies and the selection of sources, and how and why these particular methodologies and sources are most applicable to the present research. Chapter 2 provides an overview of the theoretical framework, and thus, illustrates the tools for analysing the proposed changes in attitudes and identity construction among the veterinary students. The theoretical framework, together with the methodologies, is the backbone of the thesis, and provides the concepts needed for an extensive analysis. Chapter 3 reviews the historical, conceptual and educational contexts of the human-animal relationship. This chapter is meant to illustrate the overall social, historical, and conceptual contexts within which the students interact, as well as the institutional construction determined by the NVH. It is important to recognise these contextual frames because how someone relates to animals in overall society is most likely reflected and commensurate with how they relate to animals used in such areas as research and education. The chapter is also relevant because it reflects that the students’ attitudes and relationships to animals can be consistent with the overall views in society, and further, indirectly work as an underpinning for determining if a construction of identity and a change in attitudes takes place as a result of the veterinary education and the act of conducting animal experimentation. Chapter 4 moves from the macro perspective to the micro perspective of the human-animal relationship, and introduces the reader to the informants of the research, and illustrates the overall relationship of the students to animals. In Chapter 5 an in depth analysis is conducted.
of the role of animal experimentation, ethics and power relations in identity construction. The argumentation is empirically emphasized through the students’ narratives. It has been hard at times to single out animal experimentation, ethics and power in three individual sections, in that they are so in attendance with each other. However, it has been necessary to give each of them some space of their own, in order to elucidate their importance in the process of identity construction among the veterinary students. The final chapter, Chapter 6, will offer a conclusion and a summary of the arguments posed in the project, and explore on the basis of these arguments how ethical dilemmas are dissolved and constitutive values are changed throughout the students’ education. The final chapter will, thus, emphasize the initial objectives of the thesis.

The body and structure of the thesis is meant to provide a consistent, viable, rigid and in depth analysis of the students’ attitudes and construction of identity with regard to the use of animals in education, and also how, if or in what way these changes occur.

1.4 Methodologies and the Selection of Sources

Method is never neutral or unrelated to one’s goals. When a researcher chooses a method to investigate on the conceptions of others, it is informed by such fundamentals as the argument, the worldview and the assumptions of what she wants to say. Hence, one could say that there is no clear window into the inner life of an individual, because all representations and conceptions are filtered through the lenses of language, gender, social class, and ethnicity (Denzin and Lincoln 1998: 24).

A proper methodological approach to my field of study is therefore crucial in order to achieve extensive information of the different aspects of an individual’s social life. In order to achieve as easy access as possible to identify veterinary students’ attitudes to animals, qualitative research was for me the most natural and the most viable method available. In the jungle of methodological options, qualitative method is the approach that provides both in-depth and empirical data. Qualitative
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method gives the informants an active voice in the text, and it gives me a chance to enter into a dialogue with the reader in the sense that I treat the reader as a perceptive and critical respondent (Smith 1998: 259).

I have characterized the project as an interdisciplinary study, because I have in different degrees chosen to incorporate both philosophy and anthropology. In line with these disciplines, I have also focused on the ethical aspects of human-animal relationship, primarily to examine if the students encounter any ethical dilemmas in their interactions with animals during their education. My goal is not to make any moral judgments on the basis of these findings.

The project has primarily been conducted as a case study with open-ended interviews, but I was also able to observe and participate in that I spent some time with some of the students at their school. The interpretation and analysis of the collected data will take a hermeneutical and narrative approach, with the application of discourse analysis, which will be dealt with in Chapter 2 on “Theoretical Framework”.

In the present section I examine the methodological approach to the research, both the advantages and disadvantages of my research choices, and the ethical dilemmas connected to the particular methodologies. I hope to persuade the reader that the methodological approach of this project has been carefully considered and is able to validate the aims and objectives in the most well founded way possible.

1.4.1 Qualitative Research and an Interdisciplinary Approach

Qualitative research does not belong to a single discipline, which enables me to make use of qualitative research methods without compromising the interdisciplinary approach of my study, and the other way around. Interdisciplinary methods provide breadth, as well as different aspects on a phenomenon. It can be said that you get “the best from both worlds” (McNeill, Godos and Gjerdåker 2001: 22-23). This is

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3 See Chapter 2 (section 2.4) for an extensive account of the narrative approach in the project.
4 Some anthropologists might argue that my methodological approach is not a clear-cut ethnographic one since I am to a minimal degree doing participant observation. I have nevertheless chosen to call it a qualitative, anthropological approach, because I feel that the basis of my knowledge is deeply embedded in the anthropological way of seeing the world.
especially reflected in my choice of theoretical concepts (both sociological and philosophical concepts) that again are closely knit to my methodological approach.

As a former student of anthropology I found it easy to decide on conducting in-depth and open-ended interviews, however, it was not that easy to discard participant observation. The research setting as well as the timeframe of the project, made it more informative and effective to engage in in-depth conversations with the students. In addition, participant observation would have become an obstacle in this case because of accessibility: It would be difficult to gain access and permission to participate in those lectures where experiments were conducted because confidentiality is placed on all experiments conducted at the school.

My objective was primarily to map identity construction and the possible changes in attitudes towards animals. I felt that this could be conveyed extensively through interviews and conversations with the students. I was, however, able to observe appearance and “presentation of the self” (Goffman, 1969) in the interview setting. Some of the students also gave me a touring around the school area, simultaneously expressing their views and emotions with regard to their everyday life at the school. I will examine the art of interviewing subsequently, but first I will review the main characteristics of case studies, and why I chose a case study in the first place.

1.4.2 A Case Study

Case studies have for a long time been stereotyped as a weak method compared to other social science methods. A common misconception is that case studies are only appropriate for the exploratory phase of an investigation (Yin 2003: 3). I choose to argue otherwise; the primary aim of a case study research is to capture cases in their uniqueness, and provide the case authenticity, “on its own terms” (Gomm and Hammersley 2000: 2-4). I feel that a case study provides an extensive and a comprehensive account of the phenomenon I wanted to study. It has given me an opportunity to acquire a full and thorough knowledge of the particular. I chose a case study as approach because I deliberately wanted to cover contextual conditions,
mainly because I felt that these conditions could be highly relevant and decisive to understand the processes of identity construction:

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin 2003: 13).

To separate the “phenomenon” from its context would in my case make me unable to grasp the essential core of the social processes present. It would in other words be impossible to identify and analyse the shaping of attitudes and identity construction without taking into account the specific social discourses and the specific social context the students are part of.

The reason why I chose to conduct a case study as oppose to an ethnographic study was that ethnographies and participant-observation require longer periods of time in the field. This does not mean that my choice of study was “second-best”; it rather means that case study was the most applicable and suitable method. My objective was not to map organizational structures of a distinct cultural group, it was rather to explore, describe and examine identity construction in a specific case. The reason why I emphasize this distinction is because case studies are often confused with ethnographies; regarded as an insufficient ethnographic study.

Following Yin, I propose that case study, as a research strategy, comprises an all-encompassing method in the sense that it covers the logic of design, data collection techniques, and specific approaches to data analysis. It is, thus, “a comprehensive research strategy” (2003: 14).

1.4.3 Interviews and Conversations

The qualitative research interview attempts to understand the world from the subjects’ point of view, to unfold the meaning of peoples’ experiences, to uncover their lived world prior to scientific explanation. (Kvale 1996:1)

I decided early that interviews and conversations would be the main methodological approach in collecting the data I needed. I include “conversations” as a central term
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to emphasize the fact that I wanted to keep an unstructured and open-ended frame of reference. The general outlook was that conversations open up for unexpected knowledge, and provide a broader sense of the topic discussed, especially because individuals vary a great deal with regard to their knowledge and interpretations of their own social reality. Also, the personal interaction in the interview affects both parts, and the knowledge produced by the conversation affects our understanding of the human situation (Kvale 1996: 109).

**Location, Location, Location**

The interviews were conducted at different locations. It was important for me to be aware of how the location could affect how the interview turned out. I took account of several factors that could affect the interview, for instance noise (because of the use of a tape recorder), the presence of fellow students, professors or other people that could affect the outcome of the interview, and finally, the sense of situational informality (in order to make the informant feel as comfortable as possible). The first five interviews were conducted at a small, quiet coffee shop not far from the school campus. It seemed to work well because it put ease on the interview situation and none of the distressing factors mentioned above were present, and I therefore sensed that the informants felt comfortable to talk freely about what was on their minds. However, after an unsuccessful interview session (one of the informants were clearly affected by the fact that some of her fellow students arrived at the café and sat three tables away from us. Even though we had an interesting conversation, I had to end the interview after thirty minutes because she seemed a bit nervous and unfocused), I chose to relocate the interviews. The rest of the interviews were conducted at seminar rooms, both at Blindern and at the campus of the Norwegian School of Veterinary Science. The fact that we were at their school did not seem to affect the students. We had a private room, and other people were not able to affect the interview situation. This setting also opened up for the chance to be toured around the school, and consequently, to be included and invited into areas of the school that

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5 “Interview” in the present thesis inhere the properties of being open-ended, semi-structured, and conversational.
6 Blindern is the main campus of the University of Oslo.
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I normally would not have access to (for instance, dissection room, storeroom for dissected animals, stable, reading spaces, auditoriums)

The interviews were taped by a tape recorder with consent from each of the informants. It did not seem to affect the conversations in any way – instead, and as expected, it served as a safe storage place for the student interviews.

The Questions

Steinar Kvale (1996) has defined the type of interviews I have chosen to conduct – semi structured life world interview – as “an interview whose purpose is to obtain descriptions of the life world of the interviewee with respect to interpreting the meaning of the described phenomena” (1996: 5). With this as my outset, I had in advance made a list of guiding questions for me to keep on track and be able to control the interview situation in the sense that I was sure to receive answers on the matters I first and foremost was interested in. I was careful to follow up my line of inquiry and to ask my actual questions in an unbiased manner (Yin 2003: 89-90).

The questions I had made opened up for multiple answers and were open-ended by nature. In other words, there was no yes or no, or right or wrong answer to the questions; the questions were conversational in style. I did not follow the questions persistently, as I discovered that the informants differed in both field of interest (what they emphasized as important and unimportant to pass on) and in how much information they could convey on the subjects in question. I also discovered – as is extensively explored in the analysis chapter of the thesis – that there were more to “it” than I had first assumed: There were more elements to take into account that I had not been able to foresee while developing the questions in the first place. The unforeseeable elements reflect why open-ended, in-depth interviews is such a useful methodological tool; they allow the respondents to give long or short accounts of what they consider to be important, rather than being conditioned by categories of reference like for instance in a questionnaire (Pelto & Pelto 1978: 73-74). With this approach I obtained, as expected, a wide variety of reactions, and it created a sense of informality that worked in a positive way for the informants and their responses.
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Methodological Concerns

I am aware of the fact that open-ended interviews raise some methodological concerns. I will address three concerns subsequently and argue that these methodological obstacles can be solved through an awareness and sensibility to these issues.

The first objection is that a research interview is not a conversation between equal partners; as a researcher I control the situation with regard to both topic and the critical follow up on the informant’s answers (Kvale 1996: 126). This methodological concern can be said to characterize all scientific research, and is therefore not a specific obstacle of qualitative inquiries. I solved this issue by being open with regard to my objectives, and further with a formal consent from the informants to conduct and later use their narratives in my thesis. The usual procedure before each interview was to give the informant a chance to ask me questions about my objectives, and after the interview get a “formal” permission to use their narratives in my thesis. Also, since the students in all cases, except two of the informants, contacted me, this reflected a willingness to contribute to the scientific research without any pressure involved. In spite of this, it was important to determine how deep and critical the interviews should be analysed, and if the subjects should have a say in how their statements are interpreted (Ibid: 111). I made secondary contact with the informants that had given answers I found particularly difficult to interpret. The answers could be vague and ambiguous, and therefore require a certain clarification before I could use them as valid data. The secondary contact offered the informants with the opportunity to be presented with my interpretations of their narratives – in addition, I had the chance to ask follow-up questions. This helped me to validate my findings and interpretations to a higher degree.

A second concern, which is often a main critique of this kind of qualitative research, is representativeness (Pelto & Pelto 1978: 77 & 127); can the selected informants represent every veterinary student at the Norwegian Veterinary School of Science? Some will state that the findings cannot be subject of generalisation because there are too few subjects (15 informants) (Kvale 1996: 102), and further ask what characterizes the informants that were willing to be part of the research? Do the informants have a specific interest in the topic? Did I only attract a specific “group of
people”? The latter was definitively not the case, because I experienced a great diversity among the students that made contact with me. It was not possible to identify any common agenda on their part. I felt that the interest ranged from special interest in the topic (however, I will emphasize that this does not mean that they had an “activist” agenda, or something the like), to curiosity of the topic or curiosity in the interest shown from me as a student from another institution (several of the students asked me: “Why in the world would you be interested in writing about us?”), to mere desire to help a fellow student.

A third concern in conducting qualitative research is the claim of validity and reliability (Pelto & Pelto 1978: 33). This is interconnected with the two dilemmas addressed above. For instance, positivist vicinities have claimed a “problem of validity” in qualitative research because the variables put under scrutiny are not measurable, and consequently, not easy to “test”. However, as I have tried to illustrate in this chapter, qualitative research is carried out in ways that are sensitive to the nature of human and cultural contexts, and is guided by the ethic to remain loyal and true to the phenomena under study (Altheide & Johnson 1998: 290).

In the next section I examine the ethical dimensions of conducting qualitative research, as it is important for me as a researcher to substantiate my fieldwork, interpretations and findings with a reflexive account of the research process and me as a researcher.

1.4.4 Ethical Dilemmas in Qualitative Research

Performing qualitative research requires a consideration of several ethical aspects, and it is important to take ethical questions into consideration from the very start of an investigation:

Ethical and moral dilemmas are an occupational work hazard of fieldwork that the researcher cannot plan for, but nonetheless must be addressed on the spot, by drawing on values, ideals, ethical codes, moral and professional standards, intuition and emotions. (De Laine 2000: 16)
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It has been important from the start to formulate my research goals in an explicit manner, and it has been equally important to seek permission from, and respect the privacy of, the people that has been part of the project, considering that as a researcher I am in a sense tracking norms and values that the participants are not aware of. This can be seen as overstepping certain boundaries; namely to implement and force analytical terms on the students’ everyday interactions (Creswell 1998: 114). Informed consent is therefore a central issue of ethical codes and guidelines (De Laine 2000: 33-34). As already mentioned in the previous section I was very particular about the fact that my informants agreed to take part in the research on the basis of knowing what it really was about.

It is further important for a researcher to inhere a reflexive account of herself and the processes of her research. In the end, the integrity of the researcher, her honesty and fairness, knowledge and experience, are the decisive factors (Kvale 1996: 117). It is not only important to be open and honest about my objective of research when I approach the informants, but also to have an understanding of confidentiality – trust with regard to confidential and not confidential information. It will be important to protect each informant’s identity and personal data also in the written text, by for instance the use of pseudonyms, because the ethics of relationships that are established in the field between the researcher and the subject do not end when the fieldwork ends, it carries over into the text (De Laine 2000: 2).

When the researcher moves from and through the field notes into the actual writing process, she needs to make decisions about what will be written about, what will be included and how it will be presented. This “making sense” of the collected material turns the representation of the informants also into a sort of self-representation of the researcher (Denzin 1998: 319). This is part of the problem of representativeness discussed in the previous section, and is also part of the criticism against qualitative researchers; what is the basis for knowledge claims, and how can a relativistic perspective produce solid findings (Altheide & Johnson 1998: 283-284)? I have already discussed these methodological concerns in the previous section, and I hope that the following section will convince the reader of the rigidity of the methodological approach in this study. In this respect I will argue that the methodological and theoretical framework presented in this project, and being
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reflexive and aware of my own point of view, provides a rigor platform to explore the case in question.

I claim that the most significant ethical features in qualitative research are to avoid treating the informants as faceless objects, and to exercise common sense and moral responsibility, to our subjects first, to the study next, and to ourselves last (Fontana and Frey 1998: 72-73). I will continue to reflect on ethical dilemmas in the next section, focusing specifically on my role as a researcher conducting fieldwork “at home”, “in my own backyard”.

1.4.5 Being a Researcher “in My Own Backyard”

As a last methodological concern, I feel it is important to make some short remarks on my role as a native researcher. Anthropologists have traditionally been shipped off to the most peripheral, isolated and exotic places, and this has been argued as being the best way to objectively experience and learn about other people’s way of life. In other words, the emphasis has been on the activity of “going native”. Kirsten Hastrup (1991) has argued that it is not possible at the same time to be a native and an anthropologist, because they are two different discourses, two different levels of abstractions, and two different ways of representing the self. Her main point is that it is not possible to abstract yourself from your own culture, because culture is an analytical implication (1991: 10-12).

In many ways Hastrup (1991) has a point; where the author comes from is a crucial aspect of the research. For instance, the perspective and the nature of knowledge will influence both which data the researcher is able to collect and further how these data are interpreted. The personal qualities of the researcher such as gender, age, ethnicity, social class, education, and occupation, are most likely to influence how the study will be conducted. However, despite these different points of departure, I argue that conducting research “at home” does not blur the outlook for a rigid understanding of the social relations and the social context they take place. In my case, in order to achieve an in-depth understanding of the students’ attitudes and identity construction towards animals, I argue that the method of choice is satisfactory and sufficient, and do not require a process of socialization on the part of
the researcher. It is rather an advantage than a disadvantage: I do not believe that there is a need for a physical “entry” or “exit” (Longva 2001: 87-88) to other places, followed by a process of socialization, instead the importance lies in achieving a fundamental and objective account of the “space” and the case I want to explore.

In the sense that I have certain predisposition in entering a field of study, I will examine those as an illustration of how I actually can be said to be in a better position than many others to acquire thorough understanding of the students’ attitudes. For instance, gender and age, as well as education, was, in my opinion, an advantage in this case. I believe that the students opened up to me more because I am a woman, and a student, and more or less the same age. There are a vast majority of women at the veterinary school, and as my informants are all women except for one, this gave me an advantage in the conversations. I believe that it made the conversations informal, and it was easier for them to open up regarding the different issues that came up in the dialogue. I would like to think that it was easier for them to speak to someone that is also a student, a category that they can relate to, and that they can assume share some of the experiences of the school as an institution, rather than a highly authoritative figure.

As I have established that my gender and age, ethnic origin and social status, affect the outcome of the fieldwork, I will also highlight the fact that all of the above-mentioned factors affect how I select what I understand as important data and further how this data will be interpreted. My experience and background will in this sense be part of the empirical material presented in this project. However, by seeing the world through a particular theoretical framework I am able to distance myself from some of my taken-for-granted understandings and subject the empirical material to other questions than I would be able to do from an everyday perspective (Jørgensen and Phillips 2002: 22-23).

I will finally emphasize that I did not try to select informants with the objective of finding the “perfect informant” that could represent every student at the Norwegian School of Veterinary Science. The informants are individuals and are therefore not representatives of any homogenous group. It is also important to take into account the fact that the conversations was conducted with one male and fourteen female students, and can therefore to a lesser extent be matched up to their male fellow students – because gender can be an important analytical variable.
1 Objective and Methods

However, I will still make certain generalisations with the objective of identifying and conceptualising common notions and common incentives through the students’ narratives on their experiences of themselves, fellow-students and the school at large. This is necessary to be able to provide a theoretical frame of knowledge of the case in question.
2 Theoretical Framework

Theoretical systems provide concepts and frames of reference. To be able to understand and examine how the students construct their identity and their attitudes, I need concepts that can explain these processes within a certain framework. I have chosen a sociological theory by Richard Jenkins (1996, 2004), and will in addition draw upon philosophical concepts by Per Ariansen (1997). I have found it difficult to find one theory that could extensively cover my field of study. First, because this is not a well explored area, and second, because identity theories most often take human-human relations into account, rather than human-animal relations. However, I feel that the combination of the two conceptual frames of reference, Social Identity and Constitutive Value, will provide a strong and viable framework in the process of analysing and exploring the issues at hand. In addition, I will apply discourse analysis in order to examine how the students’ accounts of the world are constructed through language, culture, and discourse. In other words, this will enable me to identify the students’ way of producing meaning, which further opens up for a narrative approach to the study, using the students’ narratives in presenting the empirical material within the theoretical framework.

2.1 Knowing Who’s Who and What’s What

It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness. Karl Marx

How do we know who we are, and how do others identify us? How does the sense of ourselves as unique individuals relate to the fact that we also share aspects of our identity with many others? How can we reconcile ourselves as “who we are” when

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1 Title is borrowed from Jenkins (2004).
we know that we can be different things to different creatures, in different circumstances? (Jenkins 2004: 3)

The human world is unimaginable without some means of knowing who we are and who others are. When meeting a stranger, or even only observing strangers, the first thing we try to do is to figure out the identity of that person. “Give-aways” about a person can be clothing, language, embodiment, answers to questions, and information from third parties – all aspects that can help us to locate the stranger in our mindscapes. Without identification humans would not be able to relate to each other meaningfully or consistently. We would not be able to have a sense of “who’s who and what’s what” (Jenkins 2004: 6-7).

Identification can, thus, be said to be a matter of meaning, and meaning always involves interaction. All human identities are by definition social identities, and the process of identification involves a constant agreement and disagreement, convention and innovation, communication and negotiation: Identity is a process: “a being and a becoming” (Ibid: 4-5). The process of identification will be at the core of the present thesis, when trying to explore the construction of identity among the veterinary students at the NVH.

For Jenkins, identity is a meta-concept; he constitutes “identity” as something that: “(…) embraces a universe of creatures, things and substances, which is wider than the limited category of humanity” (Jenkins 1996: 3). As a consequence, the concept of “identity” has more than one dimension. It has an individual dimension and a collective dimension, and they are routinely entangled with each other. Both dimensions emerge as a result of interaction, and they are produced and reproduced analogous. However, the individual dimension emphasizes difference, while the collective dimension emphasizes similarity3 (Jenkins 2004: 16).

Thus, the notion of identity establishes two possible relations of comparison between persons and things: similarity and difference. For instance, how we identify ourselves, by recognizing similarities and differences in relation to other animals, affect our attitudes towards them (which can explain why people are able to relate more to some animals than to others). The properties of an object that one interfaces with and the relative importance one gives them, both “internally” in the object and

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3 This is, however, only a matter of emphasis; each emerges out of the interplay of similarity and difference (Jenkins 2004:16).
in relationship to other things in the world, contribute to constituting an identity, mutually, of the object and of the subject (Ariansen, 1997: 33). The ability to recognize properties or facts depends, thus, on how much or in what way you are able to identify with the “object” (or even identify the “object”). Because the active aspect of identity is “to identify” – which reveals that identity is not a constant factor that is “just there” – it must always be established (Jenkins 1996: 4). Following this, it is reasonable to state that it is important to understand identity to be able to understand actions and their outcomes, both intended and unintended. When exploring the process of identity construction of the veterinary students, I will be able to understand how they act and why in different contexts.

Identity is, further, bound up by cultural discourses (or shared repertoires) that include intentionality and morality, but also networks of constraint and possibility (Ibid: 26). I discuss the role of discourses in the latter part of this chapter (2.3), where I emphasize the importance of discourse analysis. If identity is bound up by cultural discourses, this means that several factors may play a determining part in the construction of the students’ identity; it may be possible to imagine that different identities will play out in different social settings, and thus generate separate relationships based on contexts and frames. It is, thus, possible to talk about internal-external dialectic of identification: “(…) both mind and selfhood must be understood as embodied within the routine interaction of the human world, neither strictly individual nor strictly collective” (Jenkins 2004: 36-37), because the external definition of “me”, given by others (and affected by discourses), is an inseparable part of my definition of myself. These external definitions are, thus, determined by inter-personal relationships as well as the social and cultural discourses we are part of. It is therefore necessary to emphasize the relationship between individual and collective identification. It is important to recognize the social reality students interact in (which is discussed extensively in chapter 3 and chapter 4), and the discourses they are part of. In the process of identity construction, power and authority are always critical aspects to take into account in determining whose definition counts (“rules of conduct”).

But what is the relationship between institutional identities and the individuals who occupy them? (Ibid: 140). An institution is among the more important contexts within which identification becomes consequential. An
institution, which in this case is the Norwegian School of Veterinary Science, is established patterns of practice and behaviour reflecting a sense of “the ways things are done” (Jenkins 2004: 22-23). These patterns are recognized by the students, and will affect identity construction in different degrees. Thus, this shared discourse will be crucial for me to take into account in a study of identity construction. As I have already emphasized: collective and individual identity coincides in complex ways, and they are as much an interactional product of external identification by others, as they are of internal self-identification (Ibid: 176). Then, to speak of a change of identity, one also searches for occasions for someone to move in a public web of available identities. Even though it makes sense to speak of the evolution of a personal identity in spite of the determinants of “rules of conduct”, it can just as well occur as a result of the discursive frames of reference. An institution can, thus, play a part as an authoritative element in the students’ lives, and in this sense, be said to be an integral part of the human world in which individuals make decisions and orient their behaviour (Ibid: 133). When students enter the institutional order, one can assume that identity is “found” and “negotiated” or “renegotiated” in the process of “being” and “becoming”; identity is produced and reproduced in discourse:

> Our ideas, our values, our acts, even our emotions, are, like our nervous system itself, cultural products – products manufactured, indeed, out of tendencies, capacities, and dispositions with which we were born, but manufactured nonetheless (Geertz 1973: 50).

The internal-external dialectic of identification, thus, reflects that the importance lie in looking at and ask about the underlying cultural beliefs, values, and intensions.

I will continue this discussion in the next section, drawing on Ariansen’s (1997) concept of value. Constitutive value incorporates ethics into the discussion of identity construction, because the question of value is essential to human issues. We express valuation or devaluation every day, because value is value that is of something and for someone; it is a relational property (Ariansen 1997: 24).
2 Theoretical Framework

2.2 “Tell Me What Nature Contains and I’ll Tell You Who You Are”

(...)

To constitute something is to create it (...) in the sense of bringing into the world a certain meaning (...). All understanding and all identification involve placing the object of understanding into a frame of meaning. (Ariansen 1997: 32 & 35)

In the same way as the human world would be unimaginable without identification since identification allows humans to relate to each other meaningfully and consistently (Jenkins 2004: 6), the world would fall short of value without any valuers (humans) (Ariansen 1997: 24). The concept of constitutive value complements the theory of social identity in that it focuses on how identity and value are connected to how we relate to our surroundings. What objects carry what kind of values is one of many things that help form our identity. To focus on the role of values among the veterinary students are linked to the importance of ethic particularly when dealing with other living creatures, because life is for most people indispensable, and consequently generates a need to take ethical issues into account.

The concept of value is, however, quite a complex matter, and it has been subject to much debate, especially among environmental ethicists and philosophers. Values can have more than one face, and the most common distinction is between instrumental and non-instrumental value (intrinsic or inherent value). Even though non-instrumental value is described as value of an object as an end in itself, it does not necessarily reflect an ethical dimension or a moral commitment. This can easily be pointed out by the fact that an object by itself does not inform us which properties in the object are essential. If it did, we would be able to understand what something is merely by observing it, and all observers would reach the same understandings of the object’s essence (Ariansen 1997: 32). In other words, intrinsic or inherent values are often conceptualised as values that are naturally attached to and inherent in empirical properties (as if the object by itself generated an obligational value), and as

4 Ariansen 1997: 38.
5 Instrumental value is value assigned to something because of its usefulness, like a rake or a knife. Non-instrumental value is value of an object as an end in itself. This is again most often called intrinsic or inherent value (Palmer 2003: 16).
a consequence, that this indicates obligationality. However, obligationality of a value lies in that the value has a demand on us – to promote whatever the value attaches to if it is positive and to prevent it if it is negative (Ibid: 26).

An empirical “property” that is often considered to carry an intrinsic or inherent obligationality is “nature”. I argue that the ascription of meaning and significance is made up of human categories, thus, inherent or intrinsic value – in the fashion most often perceived – poses a conceptually difficult problem: First, it suggests that if “nature” has an essential inherent value then humans hold moral obligations to nature, and second, and as a consequence, it indicates that the flow of values travels from nature to culture without any moral implications given by humans. However, how is it possible for “nature” to contain a naturalistic property that would exert a moral pressure on people? If this is the case, it would suggest some sort of natural moral magnetism that will resist and attract “in itself” independently of the human sphere of morality. It seems more reasonable to say that value is relational and not inherent, either in the form of being “value for” or being “value according to”, where the referent of “according” is some human understanding of morality (Ariansen 1997: 34). The relational properties of values can further be explained by the fact that values emerge only in a purpose-oriented light. If a person wants a given part of the world to be secured or expelled, promoted or demoted, respected or neglected for oneself or for others, one introduces values into the world (Ibid: 25):

Pulling a definite something out of the flux of necessity is to give it identity, meaning and value and place it within the larger web of the everyday world (Ariansen 1997: 32)

The dialectic of values in relation to the encompassing world indicates that “value” and “valuation”, along with identity, are produced in discourses, and consequently, are driven and determined by social constructions. It also indicates, as argued, that values cannot simply “inhere” (Ibid: 21). The value you assign to an object and the properties held to be essential to the object, is another way of reflecting and constituting your identity, and hence, is part of your subjective experience (Ibid: 32). In other words, identity is formed and/or constituted, through the way you describe
or perceive objects, and this further reflects directly or indirectly how you see
yourself and how you see the world. Accordingly, the students’ descriptions of what
an animal is in different contexts are reflected by and connected to their
understandings and subjective experiences of the encompassing world. If the
students’ descriptions change – as I have proposed in the project objective that they
do – it also means that the content of their identity is subjected to change, and a
construction of identity has taken place. This element is consistent with what Jenkins

The concept of constitutive values, thus, helps bring ethics into the act of
identification and valuation, because it captures how identities and values are
connected to how we relate to our surroundings. If an ethical dilemma emerges as a
consequence of the use of animals in education, this will indicate that the students
feel a moral obligation to the animals, and this can help constitute and identify their
identity and attitudes. Thus, the relational property of value and the dynamics of
identity construction can be useful analytical tools in investigating the role animal
experimentation, ethics and power plays in the transformation of attitudes and
identities.

### 2.3 Discourse and Discourse Analysis

In the previous sections of this chapter it has been important to emphasize that
identity and attitudes do not emerge, exist or are constructed in a social vacuum.
Contextual dispositions and the internal-external dialectic in interaction are, thus,
crucial to take into account in order to understand how and why identity construction
occurs. As will be explained subsequently, both in the present section and in the
upcoming chapter, I consider the students at NVH to act within discursive frames of
reference. Consequently, to be able to understand and identify these discourses and
their effects, I need to be able to interpret the students’ narratives (hence, the
narrative approach), and also the social context within which these narratives are
constructed. The present section will, thus, explore the role of discourse and
discourse analysis in scientific research.

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6 See section (1.1)
2 Theoretical Framework

What is discourse? From a social scientist point of view, discourse is considered to be the social boundaries that define what can be said about a specific topic. The social conception of discourse is often linked to the work of the French social philosopher Michel Foucault, who is said to have placed the word discourse on the conceptual landscape of the social sciences. According to Foucault in *The Archaeology of Knowledge* (1972), discourse is a system of representation made up of rules of conduct that structure the way we perceive reality. The “rules of conduct” associated with a certain discourse can be said to be established texts and institutions that regulate what meanings can and cannot be produced (Smith 1998: 254). In other words, the discourses provided by NVH can be said to set the stage for what is permissible and acceptable behaviour and what is not, this including both manifested and unwritten rules. Discourses, in this sense, constrain our perceptions of the world (Mills 2004: 55), and can be said to be more exclusive than inclusive.

The Foucauldian concept of discourse is closely linked to power and knowledge. Power and knowledge are for Foucault two interconnected concepts; in producing knowledge, one is also making a claim for power. The question of power will be recounted later on in the project (section 5.3) where I will elaborate more extensively on the concept, as one of the aims of the thesis is to explore the rules of conduct provided by NVH as an institution, and how they affect the students’ attitudes toward animals, both on a social and an ethical basis. However, in short, Foucault’s claim is that belief systems gain momentum and power as more people come to accept the particular views associated with that belief system as “common knowledge”; each “society” has its own “regime of truth” (Mills 2004: 74). This further indicates that within such a belief system, certain thoughts and actions are frowned upon. Discourses, thus, has the effect of becoming “truths”, which constitutes a subtle form of power. However, discourses can be contested by other

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7 Foucault has a decentralized power-concept, and according to him, power is everywhere. Power is not an institution or a structure, it is a name attributed to a complex strategically situation in a particular society. Power should be conceptualised as a process, a combative struggle, which takes place between free individuals. It is productive and dynamic. Power is an endless play of domination, and it transforms, supports and reverses force relations (Flyvbjerg 2001: 117-23).

8 According to Foucault, truth and power are closely linked. Those who make statements who are not in the position of power will not be “in the true”, and consequently, not be regarded as speaking the truth (1972: 224).
discourses through resistance. This shows that an individual is not a passive recipient but a social agent that respond to discourses (Ibid: 40).

There is, however, one problematic aspect in applying Foucault’s notion of discourse to the present analysis. Foucault has a non-interpretive approach, and power centred theories like Foucault excludes an interest in “meanings” of the very subjects on whose behalf the workings of power are exposed (Ortner 1999: 158). Foucault is mainly concerned with analysing the discursive processes at work, how they structure people’s perceptions, and how discourses impose limits on people’s talk in social interaction, rather than the way that individuals carve out for themselves a place within these abstract discourses (Mills 2004: 106-107). I am concerned with both assessments. I would be in a poor position if I chose to ignore the intentions and values of the students as social agents. However, to be able to provide a rich analysis of the students’ attitudes and identity construction I also need to identify how power-relations work (Ortner 1999: 146). Foucault’s work on discourse can, in addition to the theoretical framework provided in the previous sections, thus, be useful in this project to consider the way that the students know what they know, where that information comes from, how it is produced and under what circumstances, how it is possible to think differently, and to trace why they accept something to be “true” and in a privileged position (Mills 2004: 66).

To identify the discourses within which the students interact, I need to draw on the techniques of discourse analysis. There is no set procedure for doing discourse analysis, it is rather dependent on the specific nature of the project, and the view one has on discourse (Fairclough 1992: 225). Discourse analysis has developed from a variety of disciplines: sociolinguistics, anthropology, sociology and social psychology. According to Mark J. Smith, discourse analysis is particularly useful as a technique for exploring the role of identities and representations in the organization of social life, and it highlights the way in which these identities and representations are constantly open to change (1998: 257). By drawing upon the techniques of discourse analysis I shall be in a better position to understand the effects of the students’ narratives in their concrete cultural conditions. To understand and recognize language, discourse and the cultural setting is essential in order to understand people and the complexities of identity construction. I argue that the
2 Theoretical Framework

moment we start to consider the use of *text*\(^9\), we also need to look at the role of values, because statements about the world are more than simple descriptions; they also involve intentions and meanings. This view accompany Ariansen’s (1997) concept of constitutive value in that the moment we describe, classify, categorize, and make judgments about what we observe, we reveal something about ourselves. Language and words generates and constitutes the social world, and as a consequence, they also constitute social identities and social relations (Jørgensen and Phillips 2002: 9).

### 2.4 A Narrative Approach

The typical form of framing experience (and our memory of it) is in narrative form (…). (Bruner 1990: 56)

Anthropologists and sociologists are familiar with the use of *narratives* as both collected empirical data and as a form of presentation of these data in their research accounts. I wish to have a narrative approach when examining how veterinary students shape their attitudes and construct their identity in relation to animals throughout their education, and how or if ethics play a part in the proposed identity construction.

In line with Bruner (1990), I understand a “narrative” to be composed of a unique sequence of events, mental states, and happenings involving human beings as characters or actors. These factors are the constituents of narratives, and they only have a meaning when placed in the overall configuration of the sequence as a whole (1990: 43). A narrative does not need to be true – what is critical is that it could be true, that it has a quality of verisimilitude (Bruner 1991: 4-5). Thus, narratives are experiences conveyed by the students through *stories*\(^{10}\), and they can only provide complete meaning if one take all aspects of the interview situation into consideration. Accordingly, in addition to what is said by the informants and stored on the tape recorder, I also had the ability to determine if an informant was nervous, not nervous,

\(^9\) “Text” is not only regarded as written text, it also includes all kinds of speech (Jørgensen and Phillips 2002: 68).

\(^{10}\) “Story” or informal talk – that is, *speech act* – is another word for narrative (Bruner 1986: 21)
happy, unhappy, talkative, mute, and so on. The physical and emotional factors affected how the interview turned out, and also what they would say during the conversation. It influenced how I structured my questioning with regard to what I could ask and also the way I asked the questions. It also affected what the informants would prefer to talk about, and to what extent. Thus, narratives is more than just pure speech, they also provide indications of an individual’s social and cultural constructions.

A narrative approach means using the informants’ voice in the text, and present an opportunity for the reader to see what the informants choose to talk about, and consequently, what the informants regard as significant or meaningful. This will avoid having my words and my interpretations of their narratives dominate the dissertation. This will also strengthen the validity of the empirical data, and give the informants a chance to tell their own “truths” in the text.

My role as an interpreter can, in some degree, create pitfalls with regard to how valid my interpretations will be. Misunderstandings and misinterpretations can occur; as a result it is even more crucial to convey the conversations through the informants’ narrations. As a human and as a researcher, and especially with a limited timeframe, I would never be able to get a complete insight to the other person’s experience of the world. There is a risk that what Erving Goffman (1969) has famously described as “the presentation of self” in interaction; that we are all at a disadvantage in that we cannot completely control that the signals we send are received or interpreted correctly. This is not just a pitfall with regard to me interpreting the informants’ narratives, but also the readers interpreting this text. As authors let go of their texts in publishing them, they also let go of their control of the text (Jørgensen and Phillips 2002: 209). This is one of the reasons why the narratives will be used actively in the thesis, along with my interpretations; this will give the reader an opportunity to validate the arguments and either agree or disagree.

A narrative approach can, however, be questioned in the sense that what a person experience in life isn’t always what he or she conveys to the outside world. Sometimes people make a selection of what they truly feel is most important, but occasionally rather reveal what they think the listener wants to hear or feel is most important. This can create a conception of narratives as invalid research data. Both Fredrik Barth (1983) and Unni Wikan (1995) have emphasized their scepticism to
the use of narratives. Barth claims that narratives lack a documentary validity that
other anthropological data (for instance participant observation) have (1983: 8-9).
Wikan explains the same view in that action often speaks louder than words, and that
“silent actions” gives us a better opportunity to understand how people fashion
themselves (1995: 266-267). This scepticism aimed at narratives and their role as
documentary data is, in my opinion, highly undeserved. The criticism omits several
important insights provided by this approach; especially considering the fact that we
live in a culture and society were communication and verbalism is so central
(Danielsen 2001: 271). Following the role of discourse, as it has been conceptualised
in this chapter; humans create representations of reality through language. Physical
objects also exist, but they only gain meaning through discourse (Jørgensen and
Phillips 2002: 8-9). Thus, humans’ ways of talking do not neutrally reflect our world,
identities and social relations, but play an active role in creating and changing them
(Ibid: 1). The stories people choose to tell, can in it self be immensely descriptive of
how they perceive their lives and the world they live in. It is important to ask: why
are some stories told and others not?

The conversations, mediated through the narratives in the text, will mirror the
students’ values, and the ethical assumptions of their relationships to animals, and
further enable me to recognize if an identity construction is present, and how and
why this identity construction has taken place. Considering these factors, I choose to
use the informants’ narratives actively and I am convinced that they will provide
exhaustive knowledge of the students’ perceptions.

Some Conclusive Remarks

The theoretical concepts presented in this chapter will help me conceptualise the
expected transformation of the students’ identity and attitudes towards animals as
well as the role of ethics in the proposed transformation. These theories are my key
conceptual tools because they can explain on a moral and ethical grounding, as well
as socially, why, when and in what way, the students relate to animals. In the
subsequent chapter I will provide the historical, social and geographical context for
this study. This will offer the reader a contextual frame of reference that will
implement the methodological and theoretical framework, and consequently set the
2 Theoretical Framework

stage for a comprehensive analysis of the students’ attitudes and identity construction toward animals and animal experimentation.
3 Context

: history, concept and education - understanding the context

The following chapter will be about context: historical, conceptual and educational. The aim is both to offer a comprehensive image of the contextual frames within which the students interact, and to provide a backdrop for elucidating student identity and attitudes towards animals to reveal that these attitudes are not distinctive beliefs without any root in historical and contemporary society. This account will provide in-depth knowledge on the historical, conceptual and educational (and institutional) discourses the students at the Norwegian School of Veterinary Science are, both directly and indirectly, part of.

I start by making a brief review of the historical development of the human-animal relationship (3.1). The historical review will provide understandings of why people interact with animals the way they do today, and more importantly, of the historical and social discourses the veterinary students are part of. It is particularly central considering that the students are regarded as social agents interacting in a socio-historical context (Christoffersen 2000: 110). I will switch between a focus on Norwegian historical material and British historical material. The British has played a central part in the general European development of the different aspects of the human-animal relationship. It is, thus, possible to regard this historical tradition as tangible and relevant for the Norwegian veterinary students, and consequently as a part of their constructed identities and attitudes.

In addition to the historical review, I explore how the students are introduced to “animals” on a conceptual level, and how interconnected conceptualisations of animals are with social processes (3.2). This part provides conceptual awareness of the contemporary contexts within which the students interact, particularly focusing on animals in a scientific research context (animal experimentation). It is important to make remarks on this issue because the “animal community” – as perceived by
3 Context

humans – have the capacity to represent differentiations, characters and dispositions of any given human society. They can in a sense be said to exist on the same plane and are consequently socially, morally and physically interactive with humans (Franklin 1999: 9).

Finally, an account of the geographical and structural facts about The Norwegian School of Veterinary Science (3.3) will be given, reviewing the composition of the veterinary education, and the structure and body of the Norwegian School of Veterinary Science. This account will provide a general idea of the institutional and constitutional contexts the students are introduced to during their education, and consequently give a short introduction to the discursive frames that (I will argue) challenge and generate attitudes and identities.

The present chapter hope to provide a rich and cognitive understanding of the veterinary students’ relationships to other species, and how this can affect how they view and identify themselves as well as the encompassing world.

3.1 A Brief Review of the Human-Animal Relationship throughout History

To be able to understand the discourses and the points of reference of the students, it is important to map the overall historical and social context within which they co-operate. The decision to incorporate a general review on human-animal relationship, as opposed to an examination concentrating solely on the history of veterinarians or vivisectionists, or simply reviewing the contemporary contextual facts, emerge as a result of the fact that the latter alternatives would not only limit the view on the students’ interaction with animals and be unable to grasp how, why and in what way they rationalize their relationships to other animals, but also fail to recognize the fact that how the students relate to animals in overall society is reflected and commensurate with how the students relate to animals used in such areas as research and education. To place the students and their attitudes within a historical atmosphere is consistent with placing them (and their identity) within a context of meaning, where the historical environment consequently emphasises these meanings.
Further, it is important for the reader to be acquainted with the historical matrix of attitudes towards animals as a backdrop to students’ attitudes, because this backdrop reveals that the students’ attitudes are not distinctive beliefs without any general relevance in the overall society. The point of view is that humans are fundamentally historical and cultural beings; consequently, the ways in which we understand and represent the world are historically and culturally specific and contingent (Jørgensen and Phillips 2002: 5).

Animals in History

(…) The view that the world does not exist for man alone can be (…) regarded as one of the great revolutions in modern Western thought. (Thomas 1996: 166)

Historical narratives from the West reveal that human relationships to animals have been largely anthropocentric. Theological and philosophical thought in medieval times and the Renaissance were deeply rooted in Biblical ideas and in the works of Aristotle, and later confirmed by figures such as Descartes, Spinoza and Kant. A common denominator was the idea that nature was created for the interests of humanity. Man was made in the image of God and given the ability to reason, and was therefore fundamentally different from other forms of life. The human narcissism ultimately entitled man to treat “others” as he chose (Tapper 1988: 47-48). The Cartesian doctrine\(^1\) had the effect of further downgrading the status of animals. Descartes, however, was only sharpening a distinction that was already implicit in contemporary scholastic teaching. It was a safeguarding of religion; opponents of the Christian doctrine could be regarded as theologically suspect, questioning whether humans had immortal souls or not (Thomas 1996: 34). The “legacy” of the Cartesian discourse still enables humans to take advantage of animals in multiple areas of society, especially legitimising animal experimentation (Sollund 2004: 325).

\(^1\) Descartes (1596-1650) had a mechanistic worldview, where he liked to compare the natural order with clockworks or hydraulic dolls. Simplified, the Cartesian doctrine is the idea that there only exist two rational substances in the universe, God and humans. Animals are not able to think and do not possess a soul, and their movements and behavior can only be explained mechanistically (Emilsson 2003: 84-88).
The early modern period\textsuperscript{2} was not just influenced by the mechanistic view of Descartes and his akin. It was also a period where some long established dogmas about man’s place in nature were discarded. Not everyone thought that the world was made exclusively for man. The reality was much more complicated. For instance, the growing scientific interest in natural history led to recognition of the physical similarities between humans and other animals\textsuperscript{3}. The belief in the social evolution of humankind, put forward by Charles Darwin (1809-1882), would later encourage the view that humans were only animals who had managed to better themselves\textsuperscript{4}. Another factor was that the expansion in the size of the known world caused changes in attitudes. A number of scholars (especially astronomers, zoologists, botanists and geologists) realized that the earth and the species on it had a life and a history independent of man. In other words, it had not been created for the sake of humanity. The newfound knowledge of the origin of humanity was generally too much to grasp for the average man, reflecting that anthropocentrism still was the prevailing outlook (Thomas 1996: 168-169). The difference in attitudes can be explained by the fact that scholars and thinkers often had both the time to reflect and the intelligence to realize, the zoological facts of life. The common man, on the other hand, could feel that his social status was threatened by his closeness with animals, something that was reflected through a need to emphasize his dominion over them (Ryder 2000: 68).

In addition to an increased understanding of “the mysteries of the universe”, another social change had an impact on human’s relationship to animals, namely that towns were growing. The urban expansion was accompanied with an increasing tendency to keep animals as pets. Some animals went from being mere “brutes” and “beasts” to being “companions” and “friends”, and consequently entitled moral consideration (Thomas 1996: 172). The alteration was for instance reflected by the fact that animals received personal names and that these particular animals were no longer characterized as edible (Ibid: 112-115). Today, keeping animals as pets is one

\textsuperscript{2} K. Thomas (1996) defines the early modern period as the years 1500 to 1800 in England.

\textsuperscript{3} The recognition of the physical similarities between humans and animals are by many animal activists considered to be one of the greatest paradoxes regarding the human exploitation of other animals: animals are seen as so much like us that we can substitute them for ourselves to study humans, yet so much unlike us that we can justify making them suffer.

\textsuperscript{4} Actually, writers such as Lucretius, Cicero, Diodorus Siculus and Horace had long before Darwin’s day suggested that humankind had only slowly developed from the animal condition. Aristotle had also viewed man as being on top of the natural hierarchy, but still the same kind as other animals (Richard Ryder 2000:68).
of the predominant physical and emotional relationships humans\(^5\) (especially people living in cities) hold to animals, and consequently, constitute a major part of the veterinary praxis.

Rather than the Cartesian emphasis on reason – which had been the most important characteristic justifying moral consideration – the emphasis was during the late 18\(^{th}\) century on sensation and feelings. In northern Europe it became fashionable for country curates, gentlemen, and ladies to be keen naturalists, and interest grew in the non-human animals themselves, rather than categorizing them according to edibility and the usefulness for man (Ryder 2000: 69-70). The intellectual development was stimulated by external social change: the growth of towns as already mentioned and the emergence of an industrial order that marginalized animals in the processes of production. Since the industrial order first emerged in England it was here that the concern for animal welfare had the strongest platform\(^6\). However, Keith Thomas claims that in the 17\(^{th}\) and the 18\(^{th}\) centuries almost every European country was influenced in some way or another by advocates of animal welfare, and that in the 19\(^{th}\) century this resulted in a widespread legislation on the matter (Thomas 1996: 182). It was agreed upon that it was wrong to cause unnecessary harm to animals, but not clear exactly what animals was included in this category or even what was characterized as “unnecessary suffering”\(^7\) (Ibid: 191). The animals that received most sympathy were those who communicated their sense of pain in terms humans could understand and recognize (Ibid: 177). The social changes mentioned above increased the discrepancy between attitudes and actions. A “human dilemma” emerged: “(...) they pity and they eat the objects of their compassion” (Goldsmith 1934: 38 cited in Thomas 1996: 301). As a reaction to the social changes some people adopted vegetarianism\(^8\) during the 19\(^{th}\) century in both Britain and America, but this was mainly among a minority of the middle class. Simultaneously,  

\(^5\) Reminding the reader that the historical review focus on people living in the Western world.  
\(^6\) Britain actually provided the first legislation in the world to regulate animal research: Cruelty to Animal Act (1876). The Act allowed certain experiments, but required that license applications be reviewed and authorized (Nuffield Council on Bioethics 2005:18-19).  
\(^7\) Later in the thesis, I examine how the question of necessary or unnecessary suffering is still a matter of definition in the current Norwegian Animal Welfare Act. The unsteady regulations on animal welfare opens up for definitions of suffering according to the interests and motivations of the people using animals in such areas as experimentation (Froslie 2000: 44-45).  
\(^8\) The word “vegetarian” was coined in 1842 and came into widespread use after the establishment of the Vegetarian Society in England in 1847 (Ryder 2000: 93).
slaughtering and slaughterhouses were concealed from public view and the animal origin of meat dishes became obscured (recognizable carcasses had normally been served at the table) (Ryder 2000: 92-93).

Between 1876 and the outbreak of the First World War, public debate about animal research flourished in Britain, with the founding of several animal protection organizations, and the occurrence of several public lectures, books and leaflets addressing concerns on the issue of animal research (Nuffield Report 2005: 19). In Norway the first animal protectionist society was founded in 1859, and (rather late compared to England) the debate on the use of animals for research characterized parts of the reform of the Norwegian penal code at the end of the 19th century. Debates flourished in the national assembly both challenging science and the laboratory methods as well as confirming them. The medical scientist stand argued for the incontestable connection between animal research and the welfare of the community. The ongoing debate, however, signalled the fact that this “incontestable connection” was not that apparent to everyone (Asdal 2006: 275-276). To the public, animal experimentation was considered to oppose established social norms (Ibid: 281).

After World War I the animal welfare movement seemed to lose its mass appeal, for several reasons. For instance, meat came to be considered as an important aspect of a healthy diet because of disease and because of war. Richard Ryder comments that wars tend to advocate that compassion is a sign of weakness and that worrying about suffering is cowardly. Those who called for bans on the exploitation of animals were accused as extremists or cranks (Ryder 1998: 28-29 in Armstrong and Botzler 2003: 7). Regardless of this, another, quite different trend followed the war, namely an increasing number of practices devoted to the veterinary treatment of small animals. These practices were established in urban areas, generally deriving their income from the middle-class members of society. Some small animal clinics were also established in association with animal protection organizations, and newly emerging animal sanctuaries to provide veterinary care for pet animals (Swabe 2000: 298). This was in fact an unusual sight, since historically, the veterinary profession largely focused on horses and livestock, mainly because these animals provided enough economic and nutritional value for humans. Many people visualize veterinarians as fictional romantic heroes that through dramatic sequences save the
lives of our beloved pets. This has been evident in literature as well as in films, documentaries and television series. On the contrary, veterinarians are today engaged in a broad spectrum of activities involving animals. These activities range from the treatment of domesticated animals in all sizes, to meat inspection, wild animal medicine, laboratory animal science, veterinary pharmaceutics and public health management (Ibid: 293ff). For instance, the working opportunities for the veterinary profession in Norway have changed significantly over the last ten to fifteen years. The change commensurate with the increased activity in aquaculture and aquatic medicine, and increased demand for clinical service for companion animals, but at the same time a decline in farm animal clinical practice, especially “dairy cattle single animal work” (EAEVE, Oslo Evaluation 2004\(^9\)).

Returning to the 1960’s, the development in Britain reflected a growing concern for humane treatment of animals, which further transformed into the animal rights movement (that insists on justice and fairness in our treatment of animals). The difference now from the earlier antivivisectionist groups was the marked increase in direct action (both legal and illegal). The growing concern for animal welfare continued throughout the 1970’s and the 1980’s. Peter Singer and Tom Regan emerged as strong voices for animal liberation and animal rights in the United States. Singer consistently claimed that:

> If a being suffers, there can be no moral justification for refusing to take their suffering into consideration. (…) So the limit of sentience (…) is the only defensible boundary of concern for the interests of others (1975: 9).

Tom Regan, being less concerned with the utilitarian perspective of Singer and more concerned with animal rights and the inherent value of an individual, claimed that animals as holders of rights cannot have their interests sacrificed, even to benefit human beings. The right not to be harmed contains the essence of moral protection (Regan 1983: 266-268). Today there is a great diversity of animal welfare organizations, which often result in disagreements between them, both due to concerns for organizational sovereignty and program purity (Armstrong and Botzler

\(^9\) The report is available via URL:
In addition, the debate between the (laboratory animal) scientist community and different animal welfare organisations is still flourishing, engaging people with all kinds of backgrounds and education, and making the issue of animal experimentation even more pressing today than a hundred years ago. If asked today, it is likely that most people have an opinion on or have at some point lingered on animal welfare issues and the use of animals in such areas as medical research, education and production.

The historical and social context of human-animal relationship, reflects that relationships have been largely determined by contemporary belief, social and economic circumstances, and cultural sentiments at large. The multifaceted sentiments constituted in history are part of the veterinary students’ socio-historical context – something that suggests that the students have different and discrepant starting points when they enter the veterinary education. Many of the students emphasized this when I talked to them, saying that they could easily tell who came from the countryside and who came from the city. What is especially interesting, however, was the fact that the differences in attitudes have a tendency to be “evened out”, creating a collectivity and consensus on what is regarded as the proper way to treat animals. I will discuss this in the subsequent chapter, where I try to elucidate the students’ attitudes and relationships to animals prior to their education.

In the following, I will discuss contemporary social context of human-animal relationship on a theoretical level, because it is imperative to understand how animals are both categories of reference as well as physical “objects” of interaction. The crucial aspect of the following section is consistent with the theoretical framework of the project: that physical interaction is not the only determinant in how we relate to others. Just as important is the psychological, emotional and moral identification with other living creatures, because these identifications constitute our actions.
3.2 Animals in a Conceptual Context

(…) One of the most glaring consistencies in our interactions with other animals is inconsistency (Swabe 2000: 292).

Even though the last decades bear evidence of an increasing tendency to oppose both the use of animals in scientific experiments and the use of animals for clothing and food, the common sentiment towards animals is still one of disparity and ambivalence. People, as mentioned above, still eat animals while they continue to pity these objects of their compassion (Goldsmith 1934: 38 cited in Thomas 1996: 301). The “human dilemma” is also apparent with regard to animals used in research, in that people are often caught in a moral dilemma by wishing to both maximize animal welfare and human benefits in animal research (Nuffield Report 2005: 9). The moral dilemma is consistent with the students’ (initial) attitudes, as they are part of the overall social and historical context. In the previous section, history reveals that humans have increasingly distanced themselves socially from animals. The distance has been an inevitable development, as the growth of urban spaces and industry has increased rapidly since the 18th century. The social development has also changed how we conceptualise our relationship to animals.

It is fair to assume that the students at the NVH share contemporary conceptualisations of animals as people in general; through bedtime stories, media images, social norms, language, food and so forth. These categories help construct the students’ ideas on what place animals have in their lives, and at what times. Human beings are holders of categories and indicators, and – as is the claim of the thesis – when defining what an animal *is* in what contexts, this definition reveal something about who we are. It is, thus, imperative to illustrate how interconnected not just the embodied animal is with the human world, but also the ideas around what an animal *is* and what it *represents* in different contexts.

The present section will help elucidate possible contemporary social interaction of the students with animals on a conceptual level – something that is crucial in order to understand and analyse a change in attitudes and a construction of identity.
3 Context

3.2.1 Animals as Concepts and Categories

Linn (2nd year student): I notice that I’m very drawn to pets [as opposed to large animals], and the reason for that to be apparent is that it is all about what I am used to, and what kind of life one has lived or live.

What an animal is – in the eye of the beholder – will determine how and in what way the students relate to it, and how and in what way they will treat it. The concept of “categorical distance” (Børresen 2000: 28) reflects this in the sense that to categorize something also mean that humans recognize certain properties or facts about objects, and thus, what one say about (and how one categorizes) an animal, indirectly describes oneself (Ariansen, 1997). Hence, conceptualisation is context-specific.

While sharing the same sense of social distance to animals as people in general, the veterinary students hold a special position in that they have to interact with animals in areas that others do not have access to. The laboratory or the dissection room are two such spaces, and these spaces demand a new conceptualisation of the animal. Unfamiliar settings can create conflicting categories for the students of what animals are considered to be.

As mentioned in the historical review, the “legacy” of the Cartesian discourse still enables humans, particularly medical scientists, to rationalise animal experimentation within a cost-benefit model. Michael Lynch explains this cleverly by defining the animal used in contemporary laboratory science as the “analytic animal” (as opposed to the “naturalistic animal”10). The “analytic animal” is ostensibly an artefact, a product of human intervention (Lynch 1988: 269). Thus, the “analytic animal” is an animal perceived in a medical scientist perspective and context, transforming the animal from a “naturalistic animal” into an analytical abstraction11. These abstractions of the “naturalistic animal” are further related to identification in that people identify properties according to frames of meaning and

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10 The “naturalistic animal” is the animal championed by animal rights advocates and “laymen”, to which human-like “feelings”, perceptions, sensitivities, and even “thoughts” are attributed (Lynch 1988: 267). The description of the “naturalistic animal” is consistent with that of pets.

11 I discuss the analytical abstractions of animals more extensively in Chapter 5. It is an essential distinction with regard to the discursive frames of references the veterinary students are introduced throughout their education. It can further explain how changes in attitudes occur with regard to context and discourse. In the present section, I will make the categories familiar to the reader in order to create a viable conceptual framework.
3 Context

points of reference. It is likely that the students’ initial attitudes are consistent with viewing the animal as a “naturalistic animal”, something that will be explored and emphasized in the following chapter (Chapter 4). Entering the veterinary/medical discourse in the laboratory, the view of the animal as a “naturalistic animal” comes into conflict with the notion of the animal as an “analytic animal”. The conceptual contexts the students are part of as they cross the threshold of the veterinary education are thus initially distinct from the discourse they enter into. The conflicting discourses will be focus of discussion in the subsequent chapters.

Thus, ways of conceptualising animals reflect people’s identity and their worldviews. Researchers conducting experiments acknowledge the fact that animals in the specific context are tools for knowledge, which imposes anonymity on the animals in question. Researchers most often refer to the animal as “it” or through measurable numbers, rather than giving the animal a name or referring to the animal as “he/she”. In this way, the animal is not personalized or given an identity one is able to identify with (Børresen 2000: 28). An emotional distance has been created through categorization, a labelling of others as different, as being “the other” (Sollund 2004: 324). This categorization is also consistent with what I have already argued with Lynch: the laboratory animal, and its material body, is radically transformed through a series of preparatory practices. These practices turn the animal into a bearer of a generalized knowledge, and consequently only an abstraction of the “naturalistic animal” (1988: 266). Psychologist Stan Cohen calls this type of distancing – constructed by humans – a “state of denial”, and asks how some people are able to take part in something that others see as a serious encroachment. He answers the question by explaining the human brain’s ability to deny traumatic experiences. Cohen says that:

Denial is an unconscious defence mechanism for coping with guilt, anxiety and other disturbing emotions aroused by reality (2001: 5)

I will not pursue this matter here, as it is not my place to determine the validity of psychological statements, but even so, the ability to distance oneself from some animals through concepts and categories are linked to factors such as recognition and
acceptance, context and discourse, which are social processes put under scrutiny in the present project.

Thus, general human conceptualisation, classification and theorization of animals signify or encode social thought, and help shape social discourses (Franklin 1999: 9). Lévi-Strauss (1962) argued this several decades ago, showing how animals are ever present in totemic discourse\(^{12}\), not because animals are good to eat, but because they are good to think with. Animals function as metaphors and metonyms, which symbolize people’s way of looking at the world (Hylland-Eriksen 1998: 324-326), and consequently, reflect how humans see themselves. It is a constant internal-external dialectic of identification (Jenkins 1996: 20). Hence, distance on a conceptual and categorical level is in many ways related to social processes. Actions through social (physical) and categorical distance help humans to deal with the animal world – to structure and incorporate animals into our world in an orderly fashion. This is also evident in the analysis of the students’ interaction with animals, and is especially crucial to take into account as the students move through a web of unfamiliar concepts and relations.

When interacting with animals in such settings as the laboratory or the dissection room, veterinary students are – even though part of the general historical context – in a distinct position in their relationship to animals. In choosing to become a veterinarian one is most likely an “animal-lover”. By this I mean someone with not only a specific interest in other species, but who also has an affectionate relationship to, and a desire to care for, other animals. However, because of the interaction between the students and the animals in the research setting, creating or dissolving a (moral?) connection, one might assume that settings involving veterinary students are more charged with ambiguity and ambivalence regarding the human-animal relationship than for anyone else.

Moving away from the conceptual perception of animals, the following section will give an outline of the geographical and educational facts of the Norwegian School of Veterinary Science. This will provide an in-depth account of

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\(^{12}\) Early interpretation of totemism was by Lévi-Strauss seen as utilitarian claims – the idea that there was a connection between an animal’s and a plant’s cost-effectiveness, and its place in the totemic system, was criticized by Levi-Strauss (Hylland-Eriksen 1998:324). He rather claimed that there existed analogical relations between totems and social relations. Totemism was an aspect of a universal tendency to classify in terms of a kind of associative logic ((ed.) Barfield 1997:468)
the institutional structure within which the students interact, and help position the research within a specific social and discursive context.

3.3 Geographical and Educational Facts

The Norwegian School of Veterinary Science (NVH) was first established in 1935, but had its official opening in 1936. It is currently the sole institution educating veterinary surgeons and veterinary nurses in Norway, and the school is also responsible for the major part of all veterinary research conducted in the country. The NVH is a state owned autonomous institution of higher education, with university level status. An aspect that has characterized the Norwegian veterinary profession is that it has been largely attached to the politics of food and agriculture – a relationship that has made the science of animals and the improvement of animal health important for other reasons than the animal itself. The focus of attention has been on the development of agriculture and food production, and the health of the public (Asdal 2005: 9-10). The NVH was therefore, until recently, under the responsibility of the Ministry of Agriculture. In 1997, managerial responsibility for the school was transferred to the Ministry of Education and Research (UFD). However, it is still the Ministry of Agriculture, under the auspices of the Food Control Authority, which authorizes the veterinary surgeons educated at the NVH.

The school has a student body of 470, including 80 doctoral students. The last ten years there has been a vast majority of female applicants to the study; however, the school is working hard on the recruitment of males, for instance by providing a quota system favouring male students. The main campus, and the site for this study, is based at Adamstuen in Oslo. In addition, the NVH have Sections for Artic Veterinary Medicine and Small Ruminants that are based in Tromsø and Sandnes, and runs the national animal hospital and several other clinics serving patients in and around the Oslo area. The school also incorporates the central clinical laboratory, the

13 The information is found at the NVH website (URL: http://www.veths.no/) and the Oslo Evaluation Report given by the European Association of Establishment for Veterinary Education (EAEVE) and the Federation of Veterinarians of Europe (FVE) on the 5th of November 2004 (URL: http://www.veths.no/upload/Dokumentregisteret/Oslo%20Issue%201.pdf).
Section for Laboratory Animals, and various other diagnostic clinics and teaching and research stations.

The main student campus at Adamstuen sets the stage for the present project. The campus is a major part of the students’ every day lives, and serves as their “space” of interaction on the road to becoming veterinarians. The veterinary education is carried out in the course of 5 ½ to 6 years (11 terms), and is, to my understanding, a very intensive and time-consuming education. The students often do long hours with practical learning, and have to catch up on their readings in the afternoon and evenings. As stated in the EAEVE (European Association of Establishment for Veterinary Education)-report, one of the major challenges for the school is, in fact, the “curriculum overload” for the veterinary students. Because of the depth and the breadth of the curriculum, Norway has probably a larger problem with this than many other institutions in Europe. The students’ curriculum consists of a large spectre of animals and field of studies within the veterinary profession. Since aquaculture and aqua-medicine are such relevant areas of study to the professional life in Norway, this is an important subject in the Norwegian veterinary education. In addition, veterinarians in Norway have a much broader range of responsibilities regarding environmental protection and public health than in many other countries.

Lectures and colloquia are optional; however, the students are obligated to participate in practical and clinical teaching, which involves animal experimentation. As it is written in the brochure (2005) on the veterinary education:

The use of research animals during the education: As a veterinarian one also have responsibility for research animals, and it is therefore necessary for the students to have knowledge on animal experimentation and how to take care of the animals involved in this kind of research. This makes in effect all education involving animal experimentation compulsory. The use of animals for research is however limited. It is included in those parts of the curriculum that is compulsory for all students, mostly courses that are given early in the education, but also in connection with the teachings done at the clinic. Students
accepted to the veterinary program need to be aware of the fact that this is part of the curriculum and the veterinary education.\textsuperscript{14}

The education starts with an introduction to animal biology that coaches the students in the principal of evolution, zoology, anatomic and medical nomenclature, ethology, and the function and body of organs. The course is meant to provide a basis for the forthcoming courses, which are courses on cell biology, medical statistics, animal breeding, and epidemiology. Further, there is a course on integrated anatomy and physiology, where the teaching is based on lectures, demonstrations, and laboratory and dissection sessions. The final courses are on animal husbandry, and animal nutrition and welfare, principles on immunity and disease, veterinary microbiology, parasitology, pharmacology and toxicology, food safety and a preliminary course in clinical sciences. The last four terms consist of introduction to work in different clinics and also rotations in the different field of studies such as animal husbandry, companion animals, horses, food safety and the fish industry. A large part of the teaching during the first three years involves the whole class. During the more practically oriented teaching of the fourth and the fifth years, the classes are divided into smaller student groups, which rotate among the various specialty fields. During the summer vacations of the 1\textsuperscript{st} and 2\textsuperscript{nd} year of study, students have to undertake four weeks of practical extramural work on a farm. This practical work has replaced the previous requirement of a six-month period of experience in the field of veterinary or animal work before admission to the school.

The students do not have a distinct course on ethics and the ethical dilemmas of the use of animals in experiments. There is a chapter on the syllabus connected to a sub course called “Forsøksdyrlære”\textsuperscript{15} that discusses what ethics is and some of the different ethical dilemmas connected to the use of animals. I will discuss the role of ethics and to what degree it affects the students’ attitudes to and interaction with animals later on in the project.

It is, however, worth noting that in 2002 the school initiated a committee who is committed to evaluate the school’s use of animals in lectures. Their mandate is

\textsuperscript{14} Author’s translation. The Norwegian quotation can be found at the NVH website: URL: \url{http://www.vehrs.no}.

\textsuperscript{15} Laboratory Animal Science.
first and foremost limited to the use of live animals, however as stated at their website they also wish to stimulate an ethical debate around all use of animals in the education. Their goal is to assure the ethical use of animals, to increase the knowledge of both the students and the professors on how to use animals in a “proper” way and to procure any unnecessary use of animals (increase the knowledge on alternatives). The committee consists of five members; one representative from the department of animal testing, one representative from the clinical education in small animals, and similarly from education in large animals, one representative from preclinical subjects, and finally, one representative for the students.

In the fall of 2004 the European Association of Establishment for Veterinary Education (EAEVE) and the Federation of Veterinarians of Europe (FVE) provided a report on the Norwegian School of Veterinary Science, to establish the school’s standard in a European context. The school received an overall good review, however, there were some areas that required improvements. These are not all relevant to the present study; therefore I will not elaborate on this any further. I will, however, address the study on several occasions in the subsequent sections, as this is an evaluation that is highly up to date and that provide some useful data to the current project.

**Some Conclusive Remarks**

In this chapter it has been important to establish the immediacy of animals in the human world, since we most often fail to acknowledge their omnipresence. The history of the human-animal relationship is extremely complex, and intrinsically connected to other social processes. This account is not extensive enough to cover the total field of human-animal relations\(^{16}\), but on the other hand that is not the initial focus of the thesis. I hope that the social and historical framework offered set the stage for the students’ interaction with animals in their everyday lives. It has been a primary purpose to provide categories of reference in which one can assume that the

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students are familiar with, and consequently, will provide a rigid foundation for an analysis on identity construction and changes in attitudes. In the subsequent chapter a more explicit account of the students will be presented, and the students will be given a voice of their own.
4 Informants and Animals

The present chapter provides an introduction of the informants of the research project. I present them with some short background information, what level of education they have achieved and approximate age. I have changed the names of all of the informants, so as to protect their anonymity. The idea is to give the reader an image of who the informants are and where they come from, in what sense they act as social agents in the overall social and historical context, and consequently what constitutes their initial identity.

I will, thus, enhance on the previous chapter and explore the students’ relationships to animals in everyday life. This section does not focus specifically on animals used in research; it rather gives the reader an idea of how, when and in what way the students have interacted with animals both prior to and during their education. The aim is to portray that the students share attitudes with contemporary social and cultural norms, but at the same time being part of the discursive frames of the veterinary education put them in a special position with regard to animals. The narratives presented in this section will together with the previous sections on the historical, conceptual and educational context of the students, create a viable framework to better be able to analyse and identify changes in attitudes and identity construction, and if these presumed changes are based on ethical assumptions.

4.1 Introducing the Informants

The process of collecting data in this research has been mainly through qualitative interviews. The interviews lasted up to 75 minutes, and they were conducted at different locations, all dependent on what was most convenient for the informant.

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1 Some of the students made special request to be anonymous, while others did not mind having their names revealed. I have, however, chosen to obscure all of the names, because it is not imperative for the progress of the research to reveal the students’ real names.

2 The interviews were conducted in the period 24th August – 21st September in Oslo, Norway.
The informants of the project consist of fourteen women in the ages 23 to 31, and one male student in the same age range. The lack of variety in gender can be seen as unfortunate; however, being aware of the dominance of a female aspect in the thesis will restrain me from making any unjustified generalizations. In addition, there is a vast majority of female students at the school, which in this sense reflects the distinction between the different informants in terms of gender.

I was, on the other hand, fortunate enough to interview informants being at different stages of the education. This was one of my aims when I started the research, because I found it interesting to examine if the attitudes of the students differed in some way or another across the classes and also regarding what stage of the education they were at. I did not speak to any students attending the first year of study, but I did speak to one female and one male student from the second year, three female students from the third year, five female students from the fourth year, four female students from the fifth year, and one female student from the sixth and final year of study.

The informants have different backgrounds, ranging from an urban upbringing to small town dwellers to farmers. Since the NVH is the sole institution in Norway servicing this type of education, the students come from all over the country. Some of the informants are involved with and relate to animals in different areas outside the school arena; these arenas being horse shows and horse breeding, work at laboratories for animal research, being a representative in the Committee for the Evaluation of the Use of Animals in Education, farming, having pets and two of the informants are vegetarians. The fact that the students engage in multiple relationships to animals is consistent with the social context I provided in the previous chapter. Some of the students do not have any direct contact with live animals outside of school, however as explained, the students are still part of a world, and a social and cultural context, where animals are present both on a physical and a conceptual level.

Meet the informants

The second year students: **Linn**: is 26 years old, and she was born and raised in Oslo. Except from having a few pets (a cat and a dog) while growing up, she have not had much contact with other animals, especially not farm animals. **Rune**: is in the end of
his twenties. He is born in the city, but has been living and working on different farms in his adult life. Now he breeds horses and use them in competitions. He characterizes his relationship to animals as utilitarian, both on an emotional and an economic level.

The third year students: **Signe**: is 23 years old and is Swedish. She moved to Norway primarily because she was not accepted at the veterinary schools in Sweden or Denmark. She is a vegetarian and is critical to the meat industry. **Grete**: is 23 years old. She was born and raised on a sheep farm in the south of Norway. She has the “odelsrett” to the family farm, and will take over the farm when her parents are too old to run it themselves. **Marthe**: is 23 years old and is from Oslo. She has previously worked both in a kennel and an animal clinic, in addition to school.

The fourth year students: **Ingunn**: is in the middle of her twenties, and she comes from a small town in the far north of Norway. In addition to school, she works at a clinic for small animals. **Beate**: is 25 years old, from Oslo. She has always had cats, but also a guinea pig and a rabbit. In addition to school, she works at the section for laboratory animals and animal experimentation at the University Hospital in Oslo. **Ellen**: is 24 years old. Born and raised in a rural environment. She has always wanted to be a farmer, but chose to be a veterinarian instead. In addition to school, she works at a clinic for small animals. **Sara**: is 30 years old, and comes from a small place at the west coast of Norway. She has had some pets, but has not had any more direct contact with animals. **Mia**: is 31 years old and has lived in Oslo in the majority of her adult life. She has also spent a period during a summer herding goats in the Norwegian mountains.

The fifth year students: **Rita**: is 26 years old, and born and raised in a city at the northwest coast of Norway. She has always had cats as pets. She feels that she “communicates” better with cats, than with many other animal species. In addition to school, she works at a clinic for small animals. **Lisa**: is in the middle of her twenties, and born and raised in Oslo. She has always had pets: a bird and a dog. Lisa is also involved in student welfare activities at NVH.

**Ane**: is in the middle of her twenties. She was born in Oslo, but was raised in the countryside in the south of Norway. In addition to school, she works at the

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3 “Odelsrett” is an old, Norwegian tradition protected by the Norwegian Constitution (1814) where farms are handed down from generation to generation within the family.
section for laboratory animals and animal experimentation at the NVH. **Nora:** is 26 years old. She was born and raised in the city. Her parents are both veterinarians. She has been engaged in animal welfare activities at the school, being the student representative in the Committee for the evaluation of the use of animals in education.

The sixth year student: **Miriam:** is in her late twenties. She comes from the north of Norway. She is not raised on a farm, but she has now chosen to live with her partner at his farm and is looking forward to start a life in the countryside.

The students differ considerably in background – both geographical and sociological. Thus, there is not any “typical” informant, which again offers a breadth to the data material. I will not emphasize or discuss the level of education of the students, because I did not find any significant differences connected to how far they had come in education. A distinction between the different levels might exist, however, since such a comparison has not been a primary objective in the present thesis and since I have not sufficient data material to focus on this aspect, I will not spend any time contemplating on it.

The interviews were undertaken in Norwegian, as this is the mother tongue of both the researcher and the informants (except for one, Signe, who is originally from Sweden, but speaks Norwegian). For the purpose of the thesis I have chosen to translate the narratives from Norwegian to English, with careful consideration of the choice of words and syntax.

### 4.2 The Students and Animals - A General Review

Before moving on to the next chapter where I will conduct an in depth analysis of the students’ narratives regarding attitudes and identity construction towards animals and how or if these attitudes are based on ethical assumptions, I will examine through the students’ narratives the overall relationship between the veterinary students at the NVH and animals. The investigation will illustrate the multifaceted relationship veterinary students have to animals, a relationship that coincides with the overall society⁴, and further, acknowledging the students as social agents interacting in a socio-historical context. In addition, it will reflect the distinctive relationship

⁴ See section 3.1 and 3.2 in the previous chapter.
veterinary students might be said to have regarding animals, as a result of their educational training. It will be evident later on in the thesis in what degree these relationships have changed during the course of their education, and to what extent animal experimentation, ethics and the “rules of conduct” have played a part in this change.

As already emphasized on several occasions, veterinary students are social agents interacting within the overall historical, cultural and social contexts. On asking one of the students if she thought she differed in attitudes to animals than people in general she answered:

Sara, 4th year student: I have a lot of friends that love animals, and that are not students at this school, (...) thus, if you compare me to them I am not any different. But I might be slightly more cynical when it comes to putting an animal to death for instance… Maybe I have a more objective view on pain⁵, and on what animals can be put through in terms of production. But I think you either like animals or you don’t; someone is like oooh when they see a baby, and others are oooh when they see a dog. I do it, but so do my friends (...) so I don’t think it’s that different really.

Simultaneous as Sara claims that she shares the same relationship to animals as other people, she says that she might be a bit more cynical. This confirms the statement that the veterinary students are in a special position compared to many others. First, due to their choice to become a veterinarian, and second, because the veterinary education represent a different kind of interaction with animals compared to other people; as one of the students told me about becoming a veterinarian:

Ellen, 4th year student: We’re in a special position because we can, in a sense, decide when we need to put the animal to sleep and when we want to treat it.

Linn also emphasized this relationship:

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⁵ Author’s emphasis. I discuss how pain is an important (moral) factor in protecting animals and opposing animal experimentation in subsequent sections (5.2 and 5.3.3).
Informants and Animals

Linn, 2nd year student: It’s very fascinating to look at the relationship between veterinary students and animals, because I think we have a very different relationship to animals than an animal owner would have (...) I think there are many of the students that start here with the vision: I want to save all the animals in the world, (...) but you have to remember that we’re also supposed to work with food safety and we can choose aquatic medicine, for instance. (...) It’s a lot about the protection about humans as well (...). Of course as a veterinarian you need to think about animal welfare, but you also have to think about (...) the economical consequences for farmers for instance (...). So you cannot just barge in and say: I’m going to save the world and the cows should be set free to go pasture in the fields. There are so many other things to take into account.

Another student emphasized the hardship of becoming a veterinarian, and how the choice of this education requires in a sense a real dedication:

Beate, 4th year student: [The veterinary education] is tough. You really have to want it to get through it, but I’ve known that I wanted to be a veterinarian since the 4th grade in primary school, so for me it is either this or nothing, there’s no doubt.

All of the narratives above show that the students’ relationships to animals commensurate with those of many others, but at the same time the students commit them selves to take part in other areas of animals’ lives than most others do.

In addition to assessing the veterinary students’ roles as social agents in their interaction with animals, I felt it was important to talk to the students about their social backgrounds and their relationship to animals throughout their lives. The interviews usually began with an informal conversation around these themes. This helped me to place the students within certain discourses, as well as to provide a basis for identifying changes in attitudes toward animals.

One of the first aspects that became evident to me while talking to the informants was the fact that social background was not nearly as decisive as one should think with regard to what kind of relationship they had to animals in general. However, the most apparent divide could be found between those who had grown up
in the city, and those who had been raised on a farm or in rural surroundings. They differed, in a certain degree, on what kind of areas within veterinary medicine they wanted to work (for instance, most of the students with an urban background wanted to work in a small animal clinic treating animals, and most of those growing up on a farm or close to a farm, wanted to work with large (production) animals), and in attitudes toward the use and treatment of animals. The majority of the students that has lived in the city their whole lives, some of them without any other physical relationship to animals than animals as pets (either their own pets or others), viewed themselves as very close to animals on an emotional basis, and were somewhat “ideological” in their outlook:

Rita, 5th year student: (…) Animals make me happy. They give me… I don’t know… they give me… for instance, by having a cat; it gives me peace and happiness.

Signe, 3rd year student: [My relationship] to animals is very special (…) I think it’s a kind of calling: either you have a connection with animals or you don’t. I’ve always been like that… When I was younger my mother used to place me in the pet shop while she did her errands in the city. I just sat there watching the animals… so it’s kind of special. (…) There is something special with dogs. Dogs are such a big part of so many humans’ lives. It has been done studies on those owning a dog, that have found their lives better; they have lower heart frequencies and things like that, they have a friend in a sense (…).

The students that had either been brought up on a farm, or had a close relationship to production animals, termed their relationship as loving, but “realistic”. Below are two of the students talking about their relationships to animals:

Ellen, 4th year student: (…) I come from the countryside (…) and I always wanted to be a farmer (…) but when I couldn’t become a farmer I decided to become a veterinarian instead (…) I love working with animals. I’ve always owned animals, like a dog or a horse or a budgerigar (…) but at the same time I think I have a very down to earth\(^6\) type of relationship to animals. I have always

\(^6\) Author’s emphasis.
been part of the birth of lambs, or slaughtering of animals and stuff like that
(…) not just hamsters and rabbits… not just that kind of… I don’t know, maybe
I’m more like… maybe I have some prejudices but I think that maybe in the city
you get a more… like, you buy meat in the store that is wrapped in vacuum, it is
more romanticized, more Disney… I don’t know…

Rune, 2nd year student: I have a dog and a horse. I feel that if I want to, I can
understand them (…) I can be on the same level as them… because I have the
horse to use him for competitions, but also because it’s nice to have a living
creature to have responsibility for. (…) I have a very rational7 relationship to
animals; I love them, but at the same time I see their use-value.

However, this divide between urban sentiments and rural sentiments cannot be seen
as decisive, because the informants differ within the two “groups” as well. Thus, a
categorizing in this sense is not necessarily prolific; Mia, for instance, has lived the
majority of her life in Oslo, but she still regards her attitude to animals as pragmatic
and “realistic”:

Mia, 4th year student: Like, at least, 99% of the students at this school, I’ve been
very interested, very engaged, and much fond of animals. I’ve had a few small
animals when I was younger and (…) always been downright fond of animals.
I’ve also had some contact with production animals; I’ve worked with some,
but… I must claim… I’m not like fanatically occupied with and I do not conceit
myself to believe that animals are the same as humans, I have… or you have
to… It’s very important that animals have as rich a life as possible on their own
terms, but also to be realistic8 in terms of them being used for production (…) because it’s an industry: we produce food, milk and so on, (…) which demand
that you need to have a realistic relationship to animals as means of production.

Also Ingunn views her relationship to animals as realistic, and she compares her
views and relationship to animals to that of a farmer, even though she has not been
brought up on a farm:

7 Author’s emphasis.
8 Author’s emphasis.
Ingunn, 4th year student: I love animals very much, but at the same time I have a very realistic\(^9\) relationship to keeping animals, and in what way one should relate to animals.

When I asked her what she meant by a “realistic” relationship, she answered:

Ingunn: I mean that you shouldn’t give treatment to an animal at any price, and I (...) mean that a human is infinitely more important than animals.

Grete, who has been closely involved in the routines of her parents’ sheep farm, has a somewhat different view on animals:

Grete, 3rd year student: In many ways I have a very close relationship to animals, because I have grown up on a farm with close contact to different animals, and I have from an early age been involved in birth of animals, animals that have been sick, sometimes it has been sad, but sometimes it has also been nice experiences. You’re able to see them grow, and I have a close relationship to the sheep, and the sheep have a close relationship to me, or the horse, or the cat, it’s a specific kind of communication, without words, (...) I can see that the horse is happy when I approach him in the field (...). Of course there is an economical aspect, (...) because we have sheep in order to survive, but... but I don’t think... (...) To have a good household you also need to have a relationship to the animals. (...) We have eighty sheep (...) a normal, average sheep farm (...). But those who do this full time in my district now have one hundred and fifty sheep, and this changes the relationship to the animal completely, and many of those who work as farmers today have a completely different relationship to the animals than we have (...). This keeps me from wanting to run a modern farm today, like having five hundred pigs or five thousand hens, because it’s like a factory, you cannot take care of every single animal, of every single individual, and this makes me unable to look [the animals] in their eyes and tell them honestly that I don’t want to harm them.

Examining these narratives, thus, it is evident that the students have both similar and different experiences in their interaction with animals. These similarities and

\(^9\) Author’s emphasis.
differences are not necessarily connected to their social background. However, in some sense it is possible to identify more similarities between those who had, previous to NVH, had a relationship to production animals, than between those who had had a relationship to animals only as pets or at a zoo and the like. Those students with a relationship to farming and production animals almost always, except from Grete, used the terms “realistic”, “rational” and “down to earth”, as opposed to “romantic” and “unrealistic”, about their relationships to animals. The choice of words is quite interesting because it reflects in a sense that this is what they see as the most rational and proper way to regard the human-animal relationship. These concepts were a lot less frequent among the students with urban backgrounds or small town backgrounds.

Even though it is possible to identify a certain distinction in attitudes between the students with urban and rural backgrounds, this distinction is not necessarily useful in order to identify a change in attitudes towards animals and animal experimentation. First, the distinction is not “clear-cut” since some of the students growing up on a farm conveyed a similar view as the students with an urban background, and vice versa, and second, it is not a primary focus of the thesis to explore if there exist a gap between urban and rural sentiments. The narratives presented in this section can, however, say something about the effect of the social context and the discourses the students act within, because the students’ identity is bound up by cultural discourses that include intentionality and morality, constraint and possibility (Jenkins 1996: 26). Further, as a result of their education, and entering a new discourse, the students’ identity is subjected to negotiation and consequently, as I will argue, changes. In section 5.1.4 and 5.1.5 I explore this further, portraying how the students themselves can identify a change, that the initial discrepancy in attitudes have dissolved, and finally, that most of the students have constructed and developed similar attitudes towards animals and animal experimentation. The transformation is consistent with the fact that identity is about “being and becoming” (Jenkins, 1996, 2004), and that it is constructed within discursive frames of reference. In the following chapter, thus, I discuss the fluid aspect of identity – focusing on the role of animal experimentation, ethics and power at the course of the veterinary students’ education at the NVH.
5 Attitudes and Identity Construction

: animal experimentation, ethics, and the rules of conduct

A change of identity is a stick poked into a pond: ripples spread in all directions. (Jenkins 2004: 162)

To speak of a change of identity – as will be the focus of this chapter – one assumes that people move within a public web of available identities. This does not indicate that identity is something absolute and static waiting to be worn, however as emphasized in Chapter 2, identity construction is an ongoing process of constant agreement and disagreement, convention and innovation, communication and negotiation. In spite of this, it is possible to assume that most identities and the ascription of meaning to these identities, in a given situation, are relatively stable if the individual and the collective accept them (Jørgensen and Phillips 2002: 178). The identification process the students are part of is, thus, determined by internal-external dialectic, placed within social and cultural discourses – discourses that might determine what kind of identity that is “available” and acceptable. What constitutes this movement and this change will be explored in three interrelated sections throughout this chapter; animal experimentation and the use of animals in education (5.1), ethical dilemmas, values and identity construction (5.2), and power, discourses and the rules of conduct (5.3): The use of animals in education – more specifically conducting animal experimentation – will be a focus in the first part of this chapter. This section will include a discussion on the proposed changes in attitudes and identity construction as a result of the students’ interaction with animals during their education. The proposed changes are based on what the students have conveyed in the narratives presented in the previous chapter on their relationships to animals in general, and also on what will be reviewed in the upcoming section on their attitudes towards the use of animals in education.
Further, it is important to elucidate the ethical considerations and the process of valuation that is part of the proposed identity change. It is crucial to determine the role of ethic in the students’ interaction with animals in order to understand how and why an identity construction and a change in attitude might occur. When the students place moral value on (certain?) animals, this action mirrors and sustains their identity, and it will determine how they react and act when they have to interact with animals in such areas as animal experimentation. I will, thus, discuss the ethical aspects and dilemmas of the use of animals in education, and how students on an ethical grounding constitute their identity. Constitutive value – as an intrinsic part of identity construction – is thought to play a crucial part in the proposed changes.

Finally, to recognize the complex processes through which meaning is produced – processes that involve the dynamics of power – it is important to identify the discursive frames of the NVH. Knowledge is created through social interaction in which we construct common truths and compete about what is true and false (Jørgensen and Phillips 2002: 5). The final section will, accordingly, concern the role of power and discourses; how the Norwegian School of Veterinary Science as an institution – and as a producer of the realm of discourse within which the students interact – can affect the attitudes and the identity construction of the students.

The students’ narratives will, again, provide a prominent basis for the research, analysed within the theoretical framework of the thesis.

### 5.1 Animal Experimentation and the Use of Animals in Education

What is the role of animal experimentation in terms of changing attitudes and the construction of identity among the students at the NVH?

How humans in general relate to animal experimentation and the use of animals in research and for educational purposes, differ extensively and in several degrees. What constitutes the different views can be somewhat difficult to assess, however, this section explores and discuss the prevalent views of the veterinary students. I will try to identify why, how and if their attitudes have changed at the course of their education, and what has constituted these proposed changes.
When animals are used in research and for educational purposes, the animals in question are automatically transformed into tools (and, consequently, take on a new identity) – tools for knowledge and tools for learning. This transformation correspond with the fact that the fundamental ethic of medical research is based on the presumption that humans can do things to animals that we cannot do to humans (Engh and Hem 2004: 63). The medical sciences rest on the legacy of the Cartesian doctrine – representing a dualist view of humans and their relationship to nature – that reveal a specific way of arranging the social and the natural world. This ethical foundation is, however, not without its contestants; not all people would find this position to be without tribulations – as could be recognised in the historical review above. It is, thus, central to examine how the students relate to the use of animals in teaching, and if this relationship has changed at the course of their education. The following sections – 5.2 and 5.3 on ethics and power – will further illustrate key aspects that constitute the proposed changes, enabling a primary focus on the role of animal experimentation in the present one.

The two upcoming sections (5.1.1 and 5.1.2) is predominantly descriptive and informative – first, exploring animal experimentation by definition, and second, reviewing a particular incident with one of the informants at the NVH. In spite of the sections’ descriptive nature, they have an analytic implication and are crucial as an underpinning for the following sections.

5.1.1 Animal Experimentation – Different Perspectives

Animal experimentation is a concept haunted by many – mostly negative – associations. People in general relate to animal experimentation through what they see in the media – images that often focus on particularly horrendous incidents. In this section, I “define” animal experimentation as it is perceived by the students, how it is defined by law, and as a consequence of the latter, how it is determined by the NVH. This review will give the reader a general idea of how regulations on animal experimentation can provide legitimacy and a backbone for the medical scientist discourse in the use of animals in education, and indicate how this legitimacy can generate a construction of the students’ identity.
Animal Experimentation – Defined by Law

A central argument in the thesis is that the school to a certain degree determine how students relate to the use of animals in education through both manifested and unwritten laws. The manifested and the unwritten laws uniformly provide definitions, regulations and ethical underpinnings that the students use – directly or indirectly – to conceptualise their attitudes towards the use of animals in education.

Experimentations conducted on animals are monitored to a certain extent by different governmental regulations\(^1\). I must emphasize that I have not explored – and will accordingly not discuss – the effects of the different laws connected to animal experimentation, as this is not the focus of this discussion. However, it is worth mentioning that the Governmental laws are very much consistent with the medical scientist discourse on the use of animals\(^2\). In short, the use of animals for medical scientist purposes is measured in terms of an economic cost-benefit model – acknowledging that animal experimentation is a “conflict of interest” between animals and humans – a conflict where humans usually ends up on top.

The Norwegian Regulation on Animal Experimentation\(^3\) (§3) defines laboratory animals as:

\[(…) \text{living mammals, including embryonic forms and foetal stages, birds, fish,}
\]
\[\text{reptiles, amphibians, with their free-living immature stages, and decapods.}
\]
\[\text{Fertilized eggs are exempted from the Regulation.}
\]

Further, in the same regulation, animal experimentation is defined as:

\[(…) \text{the use of animals for the acquisition of knowledge of a biological,}
\]
\[\text{psychological, ethological, physical or chemical nature, also when this is a}
\]
\[\text{necessary part of the education an institution provides. The use of animals in the}
\]

\(^1\) Norway defined an Animal Welfare Law for the first time in 1935: “Lov om dyrevern av 7. juni 1935 nr. 13. Previously any regulations on animal welfare were defined in parts of the penal code.

\(^2\) Kristin Asdal shows in a historical perspective how after much social debate at the outset of the 20th century, the Norwegian Government dismissed any particular responsibility for the medical sciences with regard to monitoring laboratory animal science. The demand from the Government was based on a cost-benefit model: the ends had to justify the means. Animal experimentation was ultimately defended by the benefits it could offer to the overall (human) society (Asdal 2006: 294-295).

\(^3\) Available via URL: [http://oslovet.veths.no/statute.html](http://oslovet.veths.no/statute.html).
production of reagents such as antigens and antibodies, etc., routine diagnostics, testing activity, and establishment of transgenic stocks, is considered to be an experiment.

Chapter VI, section 20 in The Norwegian Animal Welfare Act\(^4\) concern specifically the use of animals in education:

Section 20: It is forbidden to use live animals for teaching purposes unless necessary as a part of professional training. The Ministry may refuse to allow such use of animals if there are doubts as to its necessity. Teaching must be carried out in such a way that the animal is not subjected to unnecessary suffering\(^5\).

Even though it is not an objective in the thesis to analyse legal regulations, I will comment on two ambiguities in the latter paragraph. First, the degree of necessity both in terms of professional training and amount of suffering is a matter of debate. When animal experimentation is regarded as a necessity, and when animals suffer, will differ by definition, circumstances, and interests. An animal welfare organisation might regard any kind of infliction on animals to be unnecessary suffering, while a laboratory scientist might regard unnecessary suffering to be conducting experiments without sufficient anaesthetics. Thus, law legitimises (to a certain degree) infliction of harm on animals (Frøslie 2000: 45). This ambiguity is important to recognise, because the use of anaesthetics is one of the main arguments in why animal experimentation should be accepted as a scientific method. Second, the paragraph does not regulate the use of dead animals or the nature of death of the animal (“It is forbidden to use live animals (…)”). The latter ambiguity creates a “loophole” for a research institution, because a live animal can be acquired and brought in to the laboratory, and given euthanasia for the purpose of conducting experiments.

Governmental laws and regulations, thus, regulate the use of animals in education at the NVH. I do not have any estimate on how many animals that are

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\(^4\) Available via URL: \text{http://oslovet.veths.no/act.html}.

\(^5\) Author’s emphasis. A steady formulation of the law regarding unnecessary harm are thought to slow down any progress in the domestication of animals and the production connected to this practice. The Ministry of Agriculture can give additional regulations if needed, ensuring that the practice of keeping animals will be consistent with sentiments in contemporary society (Frøslie 2000: 44-45).
killed for the sole purpose of the training of veterinary students and how many are
donated and have died of other causes, however, in the 2004 evaluation of NVH
given by the EAEVE (The European Association of Establishments for Veterinary
Education) and the FVE (The Federation of Veterinarians of Europe), they concluded
their report with the statement that: “the use of sacrificed animals for teaching
experiments in the pre- and paraclinical disciplines should be replaced by other
forms of experiment”(2004, section 7.1)⁶, indicating a demand for reduction in the
number of animals.

Animal Experimentation – Defined by Students

When I asked the students about animal experimentation in their education, several
reacted defensively to the choice of words. Like Mia said:

Mia, 4th year student: (…) It sounds a bit dramatic to call it animal
experimentation, because it’s not so much animal experimentation; (…) yes, we
decrease the temperature on mice to see their reactions, and stuff like that, but
it’s not any tremendous amount of “animal experimentation”. Of course we use
animals in the education, but it sounds a bit more dramatic than I think it is.

Some of the students stated that they had never been involved in animal
experimentation, and that this was not part of their curriculum at the veterinary
school. However, after agreeing on calling it “the use of animals in the education”,
stories on different experiments were revealed. The disapproving reactions divulge a
great deal about people’s associations regarding animal experimentation. In the case
of the students, the associations regarding animal experimentation were mostly
negative, and seemed to reflect that this is an area of taboo. Thus, it is evident that
animal experimentation can be a very sensitive topic. As will be shown in upcoming
sections, most of the students have at some point reacted to the use of animals in the
education.

⁶ EAEVE Report (2004): Available via URL:
However, a paradox still exists in the students’ conception of animal experimentation – in that “animal experimentation” and “the use of animals in education” were by many considered to be two different matters. “The use of animals in education” was a more accepted definition – most often defended by arguments about the use of anaesthetics and sufficient pain relief (further discussion in section 5.2.1 “Ethic on the School’s Agenda” and 5.3.3 “Resistance and Stigmatisation”). “Animal experimentation”, on the other hand, was by most students perceived as horrifying acts: “(…) what I knew about animal experimentation was from the newspapers, and there you find the worst [ones]. Now I have learned much more about animal experimentation” (Marthe, 3rd year student). The horrifying acts were described as scenarios where mice run around with a human ear grown in to their backs, or apes at display with their skulls cut open. The “use of animals in education”, on the other hand, did not seem to fall under the negative category of animal experimentation for most students, because animal experimentation was identified as doing research for specific medical purposes by trained researchers.

Thus, in the present thesis I will refer to animal experimentation most often as the “use of animals in education”, because most students – as mentioned above – relate to the different experiments they have conducted not as “traditional” experiments, but as part of the education and as a compulsory part of the syllabus. In order to use categories of reference familiar to the students, I have chosen to include all student interaction with animals during the course of their education in one terminology: the “use of animals in education”. This definition, thus, includes all hands-on training the students have to go through during their education; vivisections, dissections, autopsies or training on a specific organ or part of an animal body, and physical handling and nursing of an animal. When the term “animal experimentation” is used, it will be referring specifically to the act of physical interference on an animal.

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7 Many of the students would refer to images in the media when talking about animal experimentation. These images dominated the associations they had to animal experimentation prior to the veterinary education.

8 According to a survey presented on the Norwegian Animal Welfare Alliance’ website is the view of animal experimentation as cruel, painful acts consistent with overall society. The survey shows that 56% in Norway are negative to the use of animals in fur production, and as many as 81% are negative to animal experimentation in the cosmetic industry. Available via URL: www.dyrevernalliansen.org/nyhet/n_12.php.
The Use of Animals in Education

The students interact with a manifold of animal species during their education. The NVH use animals such as cattle, horses, small ruminants, pigs, sheep and goats, dogs, cats and other pets, as well as frogs, mice, rats and fish in the education of veterinary students. The pathology section routinely receives material and organs from abattoirs for demonstration of carcass pathology indicators. Other subjects that include the use of the animals mentioned above are physiology, pharmacology, laboratory animal science, immunology, and virology (EAEVE Report 2004, section 7.1 and 7.2). Thus, the students are introduced to different species in different subjects throughout their education, and the animals are used for different purposes and in different degrees. When interacting with animals, the students’ identity are produced and reproduced analogous, despite the fact that animals do not “act back”. The students’ descriptions of what an animal is in different contexts will be part of the students’ subjective experience – mutually of the animal, themselves, and of the surrounding world (Ariansen, 1997).

The experiments conducted in the education are sometimes carried out as demonstrations by the professor, while other times the students are divided into groups were they receive the animal in question and are instructed by the professor on the procedures of the experiment. The use of animals in education is not just mere laboratory experiments, but also to learn how to nurse and handle animals. However, the physical handling of live animals is something the students are introduced to somewhat late in the education. To my understanding, this is because of the importance of learning about the inner organs and the functions of the animals’ bodies (the biology, anatomy, ethology and physiology of animals), before doing any direct hands-on management.

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10 I will not discuss the pros or the cons of the use of animals in the veterinary education, and as mentioned at the outset of the thesis it is not a research on animal rights and human wrongs. However, it is at times hard not to be critical of the application of animal models in education when exploring some of the narratives given by the students. But, with the lack of knowledge on the technological alternatives that exist, and the basic requirements for a viable and comprehensive veterinary education, I will not debate this issue. The focus of the thesis is to assess if or in what way the students shape their attitudes and construct their identity, when interacting with animals and conducting animal experiments at the course of their education.
The following section will recount one of the incidents during the fieldwork at the Norwegian School of Veterinary Science that will illustrate the ambiguities of the veterinary education, and give the reader an impression of a student’s attitude towards the use of animals in education. It is important to elucidate areas of interaction between the students and animals because it is in interaction that the students’ identity and attitudes reveal themselves.

5.1.2 Dead Dogs and Basic Views

After interviewing second year student Linn, she offered me a tour around the school premises at the Norwegian School of Veterinary Science. The campus of the NVH is quite big, consisting of several buildings varying considerably in age. Five of the buildings are from the 1920’s, the rest were built some time between the 1950’s and the 1990’s\textsuperscript{11}. There are also some outdoor areas for different kinds of big animals – giving you the opportunity to greet a horse or a cow on your way from one building to another. The oldest, original buildings at the Adamstuen premises are majestic with huge windows and long hallways. On the walls there are pictures of all of the graduates from early times until today.

Linn gave me a tour inside these buildings, and showed me where the students’ have their lectures and reading spaces, and the stable where the horses and cows and the other larger animals are kept. At the end of the tour she asked me if I wanted to see the dissection area where the students learn about anatomy. I accepted the offer, and she took me into a relatively large space where different sterile instruments were placed on several steel tables around the room. At the end of the room there was a large metal door leading in to a cooling room. She approached it and asked if I wanted to see the animals they were working on right now. The fact was that in May (this was in September) the students at the NVH had received a number of donated dogs that had been put to death for different reasons, however not for the sole purpose of being used by veterinary students. The students, after receiving the cadavers, preserve these dogs in order to learn about the anatomy of the

animal. The students are divided into groups of about five students, “cooperating” on the animal.

Anyway, when Linn opened the door to the cooling room a sweet smell came out of the room (I remember commenting that it smelled like rotten apples), and inside there lay several dogs stacked, most of them with their stomachs opened up and their ribs at display. Not being used to see either dead humans or dead dogs, I thought the sight was kind of barbaric, leaving me with a sense of disgust and disbelief. After I left Linn, the experience had me thinking. The primary reaction of disgust was both about the fact that the sight and the smell was sickening, but also because of the fact that it seemed kind of surreal for someone to cut and slice in an animal preserved in spirits for several months. It is likely that any other “outsider” would react in the same way as I did, and find it impossible to imagine working hands-on dead animals for weeks or months. Linn told me earlier in the interview about the dogs they are working on, and how she feels that it is important for the students to be aware of what they are doing and have respect for the dead animals:

Linn, 2nd year student: (…) it’s important that (…) you don’t lose your perspective and start to play with [the animal] and stuff like that… because it’s easy to kind of… to lose your feelings in a sense. (…) But I don’t think that we as veterinary students are alone in this situation, I also think that medical students lose their feelings when it comes to humans, that you don’t see the soul or the individual anymore, you rather see the body and the contents and the anatomy in a way, (…) you lose your basic views.

The experience and Linn’s statement urges several questions that I will attempt to answer in the following analysis: How do the students perceive the animals after months of working on them? Can they still view the animal as an animal? Can the animal still be regarded as something that has lived, and not just an open carcass, or an open vessel? It is not hard to imagine that the dogs easily can be transformed into instruments for the students to learn about the animal’s inner organs (something that is crucial for a veterinarian in order to conduct operations on sick animals).

Many of the students could describe the same initial reactions as I had when they were introduced to dead animals or had to perform dissections or experiments for the first time. However, many also stated that these reactions has alleviated at the
course of their education. It is a chance that the animals in these situations are transformed from being “naturalistic animals” – the dog you have at home – to “analytic animals” (Lynch, 1988) – representing only abstractions of what they used to be, and consequently giving the animal an instrumental identity. The students’ reactions will be examined in upcoming sections. I will subsequently explore the initial attitudes of the students towards the use of animals in education, and accordingly, create a basis for identifying a possible change in attitudes and a construction of identity.

5.1.3 Students’ Attitudes towards the Use of Animals in Education

The controversies of animal experimentation, as it is often perceived, are reflected in the number of students reacting to being taught and trained through the use of animals in education. In the section of “Previous Studies” (1.2), some of the surveys reflected a change in attitudes among students in Sweden, Britain and also on a transnational level. This change was identified as a decrease in empathy toward animals, and a modification in their opposition to animal experimentation, both after a laboratory animal’s course and after the termination of the veterinary education. I will subsequently explore if such a change can be evident also among the Norwegian veterinary students that I spoke to during my fieldwork. First, I will explore the initial attitudes of the students to the use of animals in education to create a foundation for identifying a possible change and construction of identity. I will present several narratives to best illustrate how the students perceive the use of animals during their education.

The attitudes toward the use of animals in education among the students I talked to can in some degrees be said to differ considerably, but on the other hand the narratives share a common concern for the ethical dilemmas connected to animal experimentation. The differences in attitudes depended mostly on the rationales each student made in order to be a part of the diverse experiments. Some of the students said that they do not mind using animals as scientific models during their education; the ends justify the means, however, not necessarily at any cost. Others feel that some of the experiments they have conducted or observed have been a cause for
concern, but still regard other experiments as a vital part of the education. Finally, some students would prefer to be without experiments if they felt they had the option to deny it (the different attitudes will be examined subsequently). Despite the discrepancies in the students’ attitudes, the majority of the narratives reveal a sense of insecurity and indecisiveness regarding the use of animals in education, something that reflects both the complexity of the issue, how values and ethics play a part in the construction of attitudes and identities, and consequently that a person’s identity is always subject to negotiation.\(^\text{12}\)

Prior to the conversations with the students I read an article in the student newspaper *Universitas*, where one of the students at the NVH stated that often after an experiment you only remember the animal and not what you have learned, and that the intentions of the experiment are not always that apparent (Eidem 2005: 6-7). This was also evident from some of the students I talked to. For instance, many of the students could not make account for why a specific experiment was conducted and what was the intension behind it. However, some of the students also had a hard time remembering what kind of animals were used in the different experiments, especially mixing mice with rats, and guinea pigs with hamsters, and vice versa – something that can indicate that the animals used in education are described in a new frame of meaning; the animal is put in the “category” of “animals used in education”, and is, consequently, less a “naturalistic animal” and more an “analytic animal”\(^\text{13}\) (Lynch, 1988). The new descriptions will be a topic in subsequent sections, exploring how the students in different degrees have accepted the school’s definition of animals in experiments, and how this definition have generated an identity construction among the students. When I asked Ellen about the use of animals in education, she said:

\(^{12}\) As mentioned briefly in Chapter 3, people are often caught in a moral and emotional dilemma when they have to take a stand with regard to animals used in research. The wish to maximize both animal welfare and human benefits in animal research can leave people with discrepant and torn views (Nuffield Council on Bioethics: “The Ethics of Research Involving Animals”, 2005:9).

\(^{13}\) See section 3.1.2 for a conceptual discussion. By “naturalistic animal” Lynch means the animal in ordinary perception and interaction; the animal in common sense, the animal as it is viewed and acted upon in the world of everyday life. An example is the relationship between a pet and its owner, a relationship that is rich with actual and assumed elements of reciprocity, empathetic understanding, and emotional attachment (Lynch 1988: 267-268).
Ellen, 4th year student: Yes, we have some animal experiments. (...) At the beginning of the first year we did something on frogs, on their muscles and stuff. They were killed for us. And we had an experiment with cold. I don’t really remember that much from it. (...) I didn’t have any feeling of “oh no, I can’t be a part of this” (...), I didn’t have that (...). But you may wonder afterwards about the necessity of tormenting those poor rats, and freeze them. (…) I don’t really remember what it was about, [laughter] but it’s possible that I learnt something from it, but I don’t feel that it was that useful.

Similar to Ellen, both Rita and Grete felt that some of the experiments could have been avoided because of the lack of effect in terms of learning:

Rita, 5th year student: I don’t think we have had many [animal experiments]; we’ve done some. And I haven’t really liked those… we could just as well have learned it without using [animals]. Thus, I don’t think it’s been animal experiments that have been necessary (...) because I didn’t learn anything I couldn’t have learnt in theory.

Grete, 3rd year student: (...) We had a frog to learn about the functionality of the muscles by using chemical substances, and in that case the frog was killed for us, we do not have to do that of course. (...) We did one [experiment] that was very special, on a sheep, regarding respiration and the heart, and we gave it different drugs.

Me: Was it alive?

Grete, 3rd year student: Yes, it was in a state of narcosis, and it was suppose to be killed anyway, or it was supposed to be slaughtered, or that was what the lecturers said, so it didn’t die there…

Me: So do the lecturers tell you that up front?

Grete, 3rd year student: Yes, in that specific case they did, but that was because there were several objections from the class. (...) There were several of us that reacted to the experiments, because we felt it was unnecessary, especially with the frogs that were transported all this way for us to do this. We were writing
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letters because we wondered if this was changeable. We feel that we could have gained just as much by watching a video, because there are so many things to take into account and the learning opportunity isn’t necessarily that good when you do the experiment yourself, because you mainly think: why did we do this, why did that happen; it’s so complex in a way. (…) I didn’t feel it was worth it… to sacrifice the frog’s life. (…) As long as it is not useful for our learning, I don’t think we should use animals.

Contrary to Ellen, Rita and Grete, Miriam feels that there is a learning opportunity by using animals in education through experimentation. However, she has also experienced experiments that she thinks could have been avoided:

Miriam, 6th year student: (…) In the beginning of school, in anatomy classes, we dissected several animals, and that was very tough. But you get used to it because you think that this is something you need to go through, and you learn a lot, and it’s animals that have been donated, you know. But we had some experiments at school, in physiology, were we used mice, rats and frogs. I felt that some of the experiments were really unnecessary, because [the school] had, due to economic reasons, made cuts [in the budget], and as a consequence the experiment lost its value.

Me: Did anyone protest on the experiments?

Miriam, 6th year student: Yes, on the [rat] experiment we protested afterwards. (…) I think it was consensus in the class, and it was also an issue at the evaluation meeting where we expressed our opinions.

What does it mean in terms of the construction of identity and changing attitudes that the students doubt the educational value of the experiments? The insecurity students have felt regarding the necessity of many of the experiments reflects that the animals that are part of the experiments are regarded to have a certain moral value. The moral value of the animals is constituted in the students’ attitudes and identity. Further, the insecurity felt by the students in terms of experimenting on animals is value-laden because it is not about the fact that they are unsure of the purpose – because the
purpose is assessed in specific school regulations\textsuperscript{14} – but more that the students are unsure of the necessity of the experiments\textsuperscript{15}. For the students, the school (indirectly or directly) reflect recklessness and sloppiness with regard to using animals – a recklessness that indicate that to use animals in this context is not something of great concern and do not pose any moral dilemmas. One student told me that in some cases the teachers did not hesitate to kill an animal if needed for the purpose of demonstrating different scientific procedures. Sara told me about one specific incident where one of the students reacted expressively on the killing of an animal for this specific purpose:

Sara, 4\textsuperscript{th} year student: I remember we were working on one; it was a guinea pig, where we were supposed to use parts of the guts to see how it reacted to different hormones and different stimulations and so forth. We were divided into groups and everybody received a peace of the guts. It was (…) preserved a couple of days in salt water in order for it to seem alive. Then [the teachers] came to the last group, but they had handed out all of the guts. So the teacher says that then we just have to kill one more (…) guinea pig, so that the last group can have some guts. Then one girl starts to cry her eyes out, and she falls apart, because it became very clear that they would kill one more for the sole purpose of group number seven, you know, because the teachers had only divided the guts in six pieces. (…) But it was the first year, and then we were (…) a bit more innocent (…). I guess we have hardened (…). Now we can laugh about it, but we didn’t laugh about it then (…). Back then you weren’t so smug.

Thus, the impact the experiments have on the students change during the course of their education – something that will be evident in the subsequent section.

Considering Sara’s statement above, the students reacted more strongly to the use of animals in the earlier parts of their education as opposed to now, and the experiments

\textsuperscript{14} For instance, the students have to sign documents that commit them to conducting experiments on animals. See section 3.3.

\textsuperscript{15} When the students talk about being insecure about the purpose of the experiments, this cannot be compared to insecurity of the purpose if one is asked to bring their doormat to school. The latter insecurity is not value-laden. When the students are unsure of the purpose of the use of animals in education it is value-laden, because the act in itself is considered to be morally objectionable in that it challenges the students’ moral regime. Accordingly, the animals are considered to hold a certain moral value to the students – constituting their identity (thanks to Ariansen for pointing this out to me).
used to make a stronger emotional impact. Many of the students have according to Sara “hardened” at the course of the education, and relating the statement to the theoretical framework, it is possible to assume that animals used in education are given a new identity both “internally” in the animals, and how these animals are positioned in relation to other things in the world. If meanings and values change, in terms of what properties that are held to be essential to the animal, the surrounding world will also change – making available other possibilities for thinking and acting (Ariansen, 1997: 32-35).

Reactions conveyed by the students to their teachers and the school at large, regarding the use of animals in the education has differed, and still differs, between the different classes. I argue in the subsequent section on power and discourses (5.3) that the reactions from the students are – in different degrees – shaped and determined by the discourses and the rules of conduct set by the NVH as an institution, and it is important to note that these discursive frames generate changes in attitudes and a construction of identity in relation to animals and animal experimentation. However, for the present the focus will remain on the veterinary students’ attitudes to the use of animals in education because this will elucidate how the students relate to the unfamiliar context of interaction and how this can affect their attitudes towards animals, and consequently, generate a change of identity.

Second year student Linn explains her views on animal experimentation as a means to an end:

Linn, 2\textsuperscript{nd} year student: (…) It’s worth mentioning that these experiments, in quotation marks, like we have been doing, are on dead animals. There has been one incident with two guinea pigs, that were put to death because of us, something that was done thirty seconds before we entered the room. (…) I feel that one should try to find alternatives, but in this case to understand [the functions]; (…) I felt that out of two evils, to choose two guinea pigs for a class of sixty students, I don’t think that’s so bad.

Several of the other students – despite their level of education – shared the same view as Linn, calling animal experimentation a “necessary evil”. Ingunn, claims in a bit more consistent way than Linn that animal experiments are acceptable as long as the ends justify the means. While Linn is also concerned for the well-being of
animals, and how animal experiments can help other animals (something that is reflected in previous narratives), Ingunn is more focused on how the experiments can help human beings. The difference in Linn’s and Ingunn’s view on when an experiment is regarded as necessary or not, indicate a difference in what they regard as valuable and when. The difference is a question of nuances, but it can still say something about how the two students see animals and animal experimentation in different ways in relation to the surrounding world. How they position animals within the larger web of the everyday world, illustrate their subjective experiences, and thus, constitute their identity (Ariansen 1997: 32):

> Ingunn, 4\textsuperscript{th} year student: I’ll say it again\textsuperscript{16}: I think that humans are infinitely more important than (…) animals. Thus, if animal experimentation is something that needs to be conducted for the sake of human welfare I think it’s ok. But, of course, it should be done in a way that’s not painful for the animals, a way that is not distressing them, but… (…).

Ingunn was the only one that emphasized, in the distinct way reflected above, the importance of humans and human welfare. The other students most often felt that certain experiments were indispensable, but not necessarily at the cost of animal suffering. They were all specifically concerned about research conducted for the cosmetic industry. Those kinds of experiments were “worst case scenario”, and consensually unacceptable. The fact that they open up for certain kinds of experiments and discard others reflects a concern for the ethical dimensions of the use of animals in education, and that at a certain point experiments becomes an ethical dilemma. However, \textit{when} the use of animals in education is an ethical dilemma and when it is not, is something that has changed for several of the students during their period as veterinary students.

\textsuperscript{16} See narrative of Ingunn in section 4.2 on “The Students and Animals – a General Review”.

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Moral Obligation and Guilt: Who is Responsible When Killing an Animal?

Even though the students are obliged to conduct animal experiments in education, and opposed to many of the tasks the students receive when working at an animal clinic or an animal laboratory, the students do not usually have to take direct part in the killing of the animals when they are being used as scientific models in their classes. The lecturer performs the procedure either before the students enter the room, before the experiment takes place, or after the experiments are conducted. The animal is injected with drugs that will put it to death in a more or less harmless way. This evasion from the very act of killing can be compared to the distancing Noeile Vialles (2002) talks about in her book *Animal to Edible*: When an individual act of killing is absent, it fails to preserve a link between the killer and the victim, and consequently, imposes anonymity on the animals as well as on the person who face them (Vialles 2002: 31). Thus, when the animal is already dead or the students do not need to contribute to the (direct) killing of the animal after an experiment, this can relieve some of the moral obligation the students might feel with regard to the animal. It is in a sense a question of the animal being part of the students’ social and moral universe. When there is no “real” killing, there might also be an elusion of moral responsibility and any feeling of guilt.

Further and with regard to conducting animal experiments, a repetitive act might remove the decisive element of acknowledging the animal as an animal (Ibid: 46). The alteration of the animal was also emphasized by several of the students, and reviewed in narratives throughout the thesis (see for instance the narrative by Sara above and Ane in the following section). It appears to be more a carcass than an animal; the animal disappears in the act of suspension. Vialles calls it a “sublime distortion of nature” and a de-animalising (Ibid: 61). Also Michael Lynch – as

17 Vialles asks with regard to the act of slaughter: “Who kills the animal? The person who stuns it, or the person who bleeds it?” She answers the questions by claiming that this doubt exists in reality: “Since anesthesia is not really fatal and since painless (or supposedly painless) bleeding is not really killing, we are in fact left with no “real” killing at all, nor do we have any one person who “really” kills; by separating the jobs, you completely dilute the responsibilities and any feelings of guilt, however vague and held in check” (2002: 45).
18 Even though Vialles’ topic is the act of slaughter – how this act can offend our sensibilities, but at the same time refrain us from eating meat – I find the terminology and the operation transferable in more than one sense.
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mentioned in section 3.2.1 – emphasizes how the animal is transformed when entering the laboratory, and consequently is given a new identity, which is only an abstraction of the embodied, “naturalistic animal” (1988: 266). The transformation of the animal might not necessarily be the case for the veterinary students, as their objective is both to view the dead animal as an animal in order to learn about animals, and because they at some point have taken part in or have to take part in\textsuperscript{19}, the actual “killing” of animals. However, it is reasonable to assume that when they are not obliged to take part in the killing of the animals used in the experiments, they are relieved from a possible moral responsibility and dilemma.

The rest of the chapter will analyse the changes in attitudes, the construction of identity, and the role of animal experimentation, ethics and power, to examine why and how these changes occur: Have a change in attitudes and an identity construction found place with regard to animals and the use of animals in education? What might have generated these changes?

5.1.4 The Changes: Emotional Distance and the Demands of the Veterinary Profession

In the narratives presented above one recognizes that some of the students identify a change in attitudes – and consequently a construction of identity – towards animals and animal experimentation. Even though the attitudes and reactions expressed through the conversations is somewhat diverse, there seems to be a general agreement that the students’ attitudes toward animals have changed or evolved throughout their education. For instance, as Beate (4\textsuperscript{th} year student) said when asked if she felt she shared the same views and attitudes to animals as the other students: “(...) No, especially in the beginning you see a clear difference between attitudes and where people come from. (...) But after a while it evens out, I think”.

The reasons for a change in identity and attitudes was not always easy to pinpoint, and never singular. The changes concerned both animals as scientific objects in experimentation as well as animals as patients at the clinic. However,

\textsuperscript{19} Many of the students are part of practicing euthanasia when working at small animal clinics and other similar part time jobs. The students are also most likely to perform euthanasia during their professional life as veterinarians after terminating the education.
changes being evident, there were still a few that claimed that their attitudes had not changed when I asked them if they thought it had during their education:

Rune, 2\textsuperscript{nd} year student: I’ve been dealing with animals before [I started at NVH] so it hasn’t changed that much (…). You get a more (…) practical relationship to it; you have to do that if you are working with animals, if you have it as a trade (…).

Grete, 3\textsuperscript{rd} year student: (…) Theoretically, animal experiments can make you more cynical; when you do it enough times it kind of looses its edge. But I don’t think that will happen in real life, because we don’t conduct that many. (…) It’s so fundamental in us, that it takes more to shake that feeling. You need to see quite many horror movies before you stop being scared of them, if you know what I mean. But of course, it’s very individual.

Ingunn, 4\textsuperscript{th} year student: I don’t think my relationship to animals has changed (…). Maybe because that I know of medical prognosis and stuff like that I might have become a bit more realistic, but… There are many that think we become blunted by seeing a sick animal again and again, but I don’t. So I don’t think I have changed that much, ask me in fifteen years maybe.

When I asked Ingunn if “outsiders” often told veterinary students that they were “turning cold”, she answered:

Ingunn, 4\textsuperscript{th} year student: (…) No, but I think a lot (…) of [animal] owners might feel that… It’s a lot more dramatic for the owner than for the veterinarian, (…) so I think it has a lot to do with that fact.

Ingunn’s narrative reflects how for the veterinary students – particularly when working at an animal clinic – the animal is a patient, but for the animal owner the animal is so much more than a random animal with an injury or an illness. Seeing it from the owner’s point of view, he or she recognizes “properties” in the animal that the veterinary student is not able to see (Ariansen, 1997), and consequently, the animal holds a different identity to the different identifiers. This has, of course, a lot to do with the fact that the veterinary student treating the animal does not know the
animal in the same sense that the owner do, and that the veterinary student is trained to look at the animal through medical concepts and categories. Still, it does not change the fact that the animal is viewed differently because of different points of reference. As Sara explains:

Sara, 4th year student: The dog goes from being a “cute dog on the street” to being a patient, someone who is sick and needs help. (…) As soon as the dog enters the clinic, it’s a patient that needs help. I know that [what I will do to it] is to its best interest in the long run. I guess that is some of the differences between humans and animals, that I as a thinking human being can inject a needle or pull out a tooth, regardless of pain, because I know it’ll be better afterwards. (…) I think that we as students and veterinarians do not project on to the animals as many human qualities as most people, especially the way pet owners do on their own pets.

Thus, the frequent lack of drama (as opposed to how dramatic it can be for pet owners) when dealing with animals such as pets, in circumstances such as surgical operations or giving euthanasia, was something many of the students could relate to. On the other hand, several of the students said that they could also associate with the pet owners and their worries, especially if the students were pet owners themselves. The contradictory situation of having a loving relationship to an animal at home and at the same time have a “professional” relationship to other animals in the laboratory or at the clinic was for many of the students a challenging reality. For instance, to operate on their own dog or cat was for many considered to be too emotionally straining:

Ellen, 4th year student: (…) I just think if it were my dog, if something would happen to my dog, I would’ve [freaked] out and not been able to do anything. Then I would have to get a good veterinarian or someone else to do it. I don’t think I ever could be professional and operate on my own dog. (…) I work at a small animal clinic and we have anaestetised many dogs. (…) I remember, my dog was supposed to do something as commonplace as pulling out some teeth that would never fall out, but I couldn’t give that dog the shot. (…) I don’t know. It’s just something emotional.
Miriam, 6th year student: (…) With an unfamiliar animal you can distance yourself in another way. Even though you can get sad if another animal is doing bad as well. (…) On other animals you don’t make the same mistake as you might do on your own animal, where you have the emotions blocking and destructing a clear mind.

An emotional distancing from the animals the students deal with during their education and in the work they do in animal clinics and so forth, seems to be the most common scenario. It seems like to distance oneself from the animals in question – mainly on an emotional basis – is both a “defence strategy” as well as something that many of the students feel compelling in order to present themselves as professional veterinarians:

Ane, 5th year student: (…) I think I’ve changed with regard to distancing oneself from what you are doing. A part of what we do, and something that is part of our education, is to practice euthanasia. And this has changed; the ability to in a way… [Pausing]. It’s never something you do with ease, even though the animal is very sick. The ability to distance yourself from what you are actually – emotionally from what you are actually doing – and just do it, that ability is better developed, if you know what I mean. It sucks, it really does, but it’s part of the job, so you just have to do it. (…) I think in that area I have become more cynical. (…) Things I reacted to before, I don’t react that much to anymore. (…) It’s very strange, but a lot of licensed veterinarians do not have animals of their own at all. (…) A friend of mine, he’s a veterinarian in an abattoir; he says that he has enough contact with animals at work so he doesn’t have a need for it. The thought has struck me, especially regarding him, that he has become so cynical that he no longer sees the intrinsic value of having his own pet that gives you something in return.

Ellen, 4th year student: (…) I have absolutely become… I don’t know if you can call it professional but in a way… The first time I was part of putting an animal to death I thought it was terrible, (…) but now I’ve worked [at the animal clinic] for three years, and learned that you cannot engage yourself emotionally in every case. But of course there are some cases were you just go: No! But I don’t know, call it cynical, I don’t know [laughter], more professional maybe.
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To distance oneself from the animals the students interact with both in education and as part of their part time jobs, is thus identified as something that is required in order to do a proper job, but also to protect their own feelings. Sara wasn’t aware of the fact that she had distanced herself when it comes to operations and practicing euthanasia before she brought a friend of hers to the animal clinic where she works:

Sara, 4th year student: I work at an animal clinic beside school, and I notice that, like the first time I had to put someone to sleep, I was very scared, I was really nervous about it, not scared, but I wondered how I would react to it. (...) This summer I brought a friend with me that is a nurse at the emergency unit, and she is used to seeing humans in the same situation. She came with me to see what my work was like, and we had a dog at the clinic that had suffered for a long time. We had tried to operate on it, but there wasn’t anything more we could do. [The dog] was hurting a lot and it was a very cute, young dog, a puppy. And we had to put it to sleep, and I was the one who had to do it. I was just glad it could die, but my friend started to cry, and she thought it was awful and had to go home, and she had been sad the rest of the night. Then I thought: oh my god, I have become really cold. (...) In that situation you think that: god, I have become so blunted. But then I just have to think that I have a more realistic view, because I knew the patient for a long time. (...) You might feel a little indifferent sometimes, but that doesn’t mean you go around tapping on animals’ heads just for fun.

Only one of the students emphasized that she had grown closer to animals, rather than distancing herself from them. It is worth noting that she is one of the students that most fiercely stressed her concerns on the different experiments conducted in their lectures. She emphasized that she now had a more realistic view on how to handle animals with regard to the fact that sometimes it is better for the animal to be put to death than to be treated, however this had not made her devalue her relationship to animals:

Signe, 3rd year student: I think my relationship is stronger (...). I see myself more as a friend of the animals now (...). [The veterinary education] is the hardest thing I’ve done in my life, and there have been many times I’ve asked
myself: *Do I like animals sufficiently to go through this*, and the answer is *yes*, and that is why I continue.

The narratives presented in this section reflect that the students feel that the veterinary profession demands certain “professionalism” with regard to animals in order to do a good job. However, the narratives also reflect that the students’ distance themselves from acts of interference on animals to protect themselves emotionally. Both of these “demands” – emotional distance and professional appearances – generate a change of identity if the students accept them. Most of the students stated, as portrayed in the narratives above, that they have accepted these demands as part of the profession, and that this would ultimately make them better veterinarians.

I must, however, comment on an obvious difference; the difference between treating an animal in a doctor-patient relationship and conducting experiments on animals for learning, in terms of the ethical dilemmas these actions can pose. In a situation where the animal is a patient, the physical interference on the animals is less likely to pose an ethical dilemma because the intentions are to help the animal in question to have a better life, or to end a painful one. When conducting animal experimentation, it is a different matter, because the students might not regard the ends as justifiable for the means. The changes examined in the present section, mostly concerned interactions when the students would treat animals as patients, and not as scientific objects. It is still important to recognise a change in this relationship because it elucidates how animals are conceptualised differently in different frames of meaning – constituting, mutually, the identity of the animals and the students (Ariansen 1997: 33).

The discursive frames of reference produced by the school, might help the students to conceptualise their relationships and attitudes towards the use of animals in education, and therefore ease possible conflicting sentiments. Discourses have the ability to structure people’s perceptions, and can consequently generate a construction of identity in changing the students’ views on animals used in experiments. This will be a focus in the subsequent section.
5 Attitudes and Identity Construction

5.1.5 The Changes: Pragmatics in the Making?

The most frequent word among the students when I asked them how they would describe their relationship to animals and animal experimentation now as opposed to before they started their education was “realistic”. Many of the students stated that today – as opposed to previously – they have the knowledge to make more valid assumptions on what kind of damage and pain experimentation could inflict on animals and that this knowledge make them accept certain experiments as indispensable. The new “truth” – the change of description – is important to take into account as a generator in identity construction, because the students’ newly acquired knowledge is the school’s “regime of truth” distinguished from what is considered to be false and unaccepted (Mills 2004: 74). Further, since understanding and identification involve placing animals into a certain frame of meaning, it means that this understanding and identification constitute the identity of the students, and is part of their subjective experience of “reality” (Ariansen 1997: 35).

In one of the previous quoted narratives of Linn\(^{20}\), she stated something that can be interpreted as being “the end justifies the means” sort of outlook on animal experimentation. However, this pragmatic position has not always been Linn’s view on animal experimentation. In our conversation she emphasized how she always have had a more romantic relationship to animals, especially pets, and when I asked her about how she felt about animal experimentation before she started at the NVH, she answered:

Linn, 2\(^{nd}\) year student: (…) I was totally against it. I was totally against it. But then I imagined animal testing as electrodes attached to the brain of a living cat and (…) absurd stuff like that, which is horrible and which I still think is horrible. But (…) it’s kind of difficult to explain why I think it’s ok to kill two guinea pigs for the cause of education, but in a sense it makes us better veterinarians, and in the long run I think we’ll save more animals than we’ll ever have to kill during the education.

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\(^{20}\) See section 5.1.3.
A change in attitudes has evidently taken place, but it is not necessarily obvious why this change has occurred. Also Sara identifies a change in her attitude towards animal experimentation. She is more consistent than Linn on when her views changed and why:

Sara, 4th year student: (...) I’ve never liked animal testing that hasn’t been indispensable. I think that it is troublesome, I still do. (...) But I’m more positive to it now really, after I’ve been to the research section at the NVH, because I can see that they are very clever and (...) good with the animals. (...) There have not been a lot of experiments. (...) The experiments we’ve conducted, some [students] have reacted to, because they felt it was unnecessary; like, that we could have used fewer animals or more students on each animal. (...) I also felt the same really, then. I thought it was kind of unpleasant. I remember one experiment where we used frogs; it wasn’t really an experiment, more like a demonstration. I remember that I thought to myself that we could’ve gotten by with only one to show the whole class, instead of everyone having [one].

Sara identifies that she has changed her views as a result of seeing how “it really is”. After visiting the research section and seen how good they are with animals, this has changed her views on animal experimentation from being negative to being positive. The change is constituted in her identity – changing her description of the “properties” of the animals used in experiments and the relative importance she gives them (Ariansen, 1997). Sara’s views – not just on the usefulness of animal experimentation but what an animal represents in what contexts – have changed.

However, when Sara is reviewing some of the experiments that she has been part of, she still remember them as “unpleasant” and “unnecessary”. The terminology reflects a certain inconsistency in her attitudes – something that characterizes many of the students’ narratives – and that creates urgency for questions on why. Why would one feel an ease regarding the use of animals for certain research agendas, and at the same time feel unease with being part of it oneself? This is one of the most conflicting questions in the thesis, and also one that I have chosen to interpret as a sign of conflicting basic, ethical assumptions. The students are veterinarians “in the making” (Barth, 1988), and their original ethical assumptions are tested and subject
to negotiation, and create an inconsistency in their attitudes. Many of the students are unsure of what is the most correct way to react to the use of animals in education. It might also be harder to conceptualise an attitude toward animal experimentation because of the now widespread concern for animal welfare, in the sense that the discourses of the NVH and the discourses posed in large parts of society come into conflict with each other\textsuperscript{21}. This will be extensively discussed in part 5.3.

Evidently not all of the students have felt comfortable being part of animal experimentation and conducting it as a means for enhancing their learning opportunities. For many of the students, the fact that they have had to be part of – most of them indirectly – the killing of animals, has meant that they have had to compromise their own ethical assumptions. To conscientiously object is not easy, especially when most of the students refrain from speaking up and the teachers are rigorously sticking to their traditional means of teaching. These conflicting sentiments will be discussed in the upcoming sections, and will to a certain extent be able to explain how the students construct their identity through the internal-external dialectic of the students, the teachers, the school, and society at large.

\section*{5.2 Ethical Dilemmas, Values and Identity Construction}

Ane, 5\textsuperscript{th} year student: (…) [Ethics] make you think more thoroughly through things, that is what it has changed for me. Things that earlier might have seemed more black and white, you now see the grey zones more clearly.

How or to what extent do ethics play a part in determining possible changes in attitudes? In what way does the moral obligation reveal itself and constitute identity in the students’ interaction with animals?

The ethical aspect of the students’ interactions with animals is a pressing issue, because when interacting with creatures that are so in attendance with humans’ social and moral world, it can generate ethical dilemmas. For some of the students the use of animals – in certain ways in education – might in some degrees generate an “identity crisis” in terms of compromising basic ethical assumptions and

\textsuperscript{21} See also section 3.2.1 “Animals as Concepts and Categories”, where I discuss how Lynch distinguishes between the “naturalistic animal” and the “analytic animal”.
challenging constitutive values. I will, consequently, examine some of the narratives that were conveyed when talking to the students about ethical issues both emerging as dilemmas in interaction with animals and as a part of their curriculum.

Ethic is an integral part of identity construction, because identity is bound up by cultural discourses that include intentionality and morality (Jenkins 1996: 26). Ethical assumptions are repeatedly implicit in the students’ narratives, and for that reason, it is important to elucidate the narratives’ ethical aspects. By recognising the ethical foundations of the students narratives, it will reveal how the students’ initial assumptions can come into conflict with the ethical underpinnings of the veterinary education, and to what extent this conflict generate a change in attitudes and construction of identity. Descriptions in the students’ narratives of “discomfort”, “dislike”, “unnecessary harm” and so forth will be indicative of an interaction with animals that challenge the constitutive values of the students; it is likely that the question of values emerge as a result of the act of experimentation, in that this act contest the students’ “moral regime” (Ariansen 1997: 25, 2000: 178-179). I have so far used the term “ethic” freely without any proper definition; I will therefore try to give the concept a useful definition before moving on.

**What is ethics?**

In philosophical terms ethics extend to most of our duties and obligations as we interact with our surroundings, and morality is, consequently, determined by what we consider to be right or wrong. When the moral line has been crossed, we often tend to refer to the act as immoral or unethical (Light and Rolston 2003: 2-4). Ethics are therefore often related to people’s personal assumptions and feelings, and people have different ideas of when and at what time a moral dilemma emerges or a moral limit is crossed. These personal assumptions and feelings are most often determined by social elements such as norms, traditions, culture, history and so forth; in other words, ethical assumptions are in a certain degree shaped by discourse.

However, this definition of ethics does not necessarily answer an essential question in the present study: What generates and constitutes the obligational aspect of ethics (particularly ethics in relation to animals and animal experimentation)? Obligationality in ethics becomes an issue when the “moral regime” (Ariansen 2000:...
178-179) of the students is offended – emerging as a result of what the students perceive as moral obligation to objects. Thus, even though the animal is not regarded as a moral agent, the act of animal experimentation can be regarded as morally objectionable because the act in itself indicates certain attitudes and meanings that are considered morally objectionable – for instance – inflicting harm on a sentient being. Obligationality emerges or reveals itself when the students recognise certain ethical relevant properties “internally” in the animals and its relationship to other things in the world (Ariansen 2000: 176-179, 1997: 33). As a result, a compromise in ethical assumption can occur when conducting animal experimentation.

The role of ethics in the students’ education is reflected both directly and indirectly through the narratives conveyed on how they relate to the use of animals in education. Several questions come into mind when studying the narratives of the students talking about their experiences with animals and laboratories: When so many students feel uncomfortable and reluctant conducting animal experiments, what does this tell us? Is it that the students identify the animal as a conscientious being that makes them hesitate before they go through with the acts? Is it because society’s norms reflect that people should not harm others unnecessary – including certain (?) animals – that makes it so distressing? Is it the students’ ethical assumptions, the moral principles that they have learnt and that their consciousness allows them to act upon, which are jeopardized or affirmed?

I will in the following sections try to explore how conflicting ethical discourses can generate an “identity crisis” and ultimately dissolve the conflict through changing ethical assumptions, and consequently, changing attitudes and identities.

5.2.1 Ethics on the School’s Agenda

When I spoke with the students about possible ethical issues concerning the use of animals in education, I tried to map to what extent different ethical dilemmas have been present and discussed in their lectures and on their syllabus. Ethical issues are not confined to one specific subject in the veterinary education, but are incorporated into more (expected) common sense behaviour and rules of conduct by the school,
and are often something that are discussed by the professors as “they go along”. It is thus – as determined by law\textsuperscript{22} – expected by the students to occupy a certain (“common sense”) ethical underpinning in relation to animals. One exception is Chapter 9\textsuperscript{23} in the compendium on Forsøksdyrlære\textsuperscript{24} (Engh & Hem 2004: 61-66) where the ethical dilemmas of animal testing – both in education and in research at large – are discussed. Even though the chapter tries to discuss some of the pressing ethical dilemmas in laboratory animal science, it is evident that the issues are discussed within a medical scientist discourse. The discussion is more concerned with ethical issues “when the damage is done” rather than “how can we prevent the damage in the first place”, meaning that the examination is mainly about how one can improve the situation for the animal in the research situation rather than on the philosophical aspects concerning values and morals, animal welfare and animal rights. It seems like the philosophical debate on animals’ position in the (human) world is absent.

To review the contents of Chapter 9 in Forsøksdyrlære (2004), it examines very briefly and in general terms, the concepts of morals, ethics, and animal testing, and the attitudes connected to this practice. Ethic is viewed as a matter of opinion, and to be ethical is to act according to acquired moral underpinnings, or according to ones conscience. The chapter further discusses the evolutionary concepts of humans and animals\textsuperscript{25}, and discusses how animals are tools for medical research. What animal experimentation has accomplished in terms of social and medical progress is also included, and this section helps in many ways to justify the use of animals in medical research. Further, the authors discuss the value of animals and animal experimentation at large. In these sections, the use of animals for medical scientist purposes is measured in terms of an economic cost-benefit model, acknowledging that animal experimentation is a “conflict of interest” between animals and humans.

\textsuperscript{22} See section 5.1.1: The Norwegian Animal Welfare Act presuppose an evaluation based on common sense – within a legal framework – of when an animal is inflicted with unnecessary harm (Frøslie 2000: 47).

\textsuperscript{23} Chapter title: “Etikk: Holdninger til dyreforsøk og bruk av dyr i undervisning” (English translation: “Ethics: Attitudes to Animal Experiments and the Use of Animals in Teaching”)

\textsuperscript{24} Laboratory animal science

\textsuperscript{25} The authors highlight the evolutionary positioning of humans compared to animals, and explain how humans are the only species in the world to be conflicted with ethical dilemmas. This is because humans have the ability to feel empathy, and thus, to imagine how a mouse can feel pain, which create dilemmas on a moral and ethical grounding (as opposed to what another animal species would feel) when we inflict pain and impose ourselves on other species (Engh & Hem 2004: 61).
In the last section, they explore the role of animals in education. This part is divided in three sections: first, they examine what is constituted in law, and then they discuss the importance and the profits of using animals in education, and the section and the chapter ends with commenting on the debate concerning if students should be able to refuse to take part in experiments: “Should students be forced to participate in animal experimentation if the students have serious ethical apprehensions? Should not this be weighed against the expected use and benefit of the lectures? What do you think?” (Engh & Hem 2004: 61-66).

The chapter reflects that the authors are trying to give the students an opportunity to make up their own minds according to the different moral and ethical issues discussed. Questions the students can contemplate upon are: Should we use animals to solve pressing medical objectives or not? What is your attitude? What about the use of animals in education? The questions opens up for reflections around different ethical dilemmas, however, there is still a sense of a subtle form of agenda pushing, and a rationalization of animal experimentation. The underlying principle of the chapter is that laboratory animal research is important and has provided positive results, for both humans and animals, and that even though there are alternatives, these cannot replace all animal experiments, probably not in the future either. At the outset of the compendium the authors²⁶ openly state that they are positive to animal experimentation, however that this does not indicate that animal experimentation always is the best way to go.

Even though the school opens up for the students to make up their minds independently regarding animal experimentation, the students are still subjected to the prevailing discourses. Sara recounts how ethical issues concern to a large degree only laboratory animals, and how this has changed her attitude on ethical dilemmas concerning such procedures:

Sara, 4th year student: (...) [Ethics] have mostly concerned laboratory animals (...), but it has of course been informative (...). It has alleviated²⁷ the [negative

²⁶ It is important to mention that the authors of the compendium are connected to the Norwegian School of Veterinary Science, thus, not external professors.
²⁷ Author’s emphasis: The English word “alleviated” have in this context replaced the Norwegian “formildende” and emphasizes the argument above; that the school’s rationale further helps the students to rationalise animal experimentation.
attitudes] on animal experimentation and stuff like that. (...) I’ve no longer any problem with defending proper experiments, I don’t, and I’ve learned that here [at NVH]. Earlier I would’ve been very doubtful towards experiments [on animals].

This narrative enhance on the previous statements of Sara\textsuperscript{28}, and portrays how she has adapted a new understanding of experiments on animals, and is now, as opposed to previously, able to defend “proper experiments” without compromising her ethical assumptions. This emphasizes the fact that values are relational and constituted by Sara’s understanding of morality. It is further explained by the fact that values, being relational rather than naturalistic properties, emerge only in a purpose-oriented light. Sara determines moral value by securing or expelling, promoting or demoting, respecting or neglecting given parts of the world. By accepting animals as tools for research means that she has a new description of animals and animal experimentation that constitutes her identity (Ariansen 1997: 25, 33).

Rita also expressed that she has, in a large degree, been affected by one of the professors lecturing on ethical dilemmas concerning the use of animals in education, and that these lectures have helped her to view experiments within another framework:

Rita, 5\textsuperscript{th} year student: (...) There have been [some professors] that have dealt with [ethical dilemmas], and especially one [person]. (...) He’s very competent, I like him a lot and he has different perspectives on the matter. And the things he has said have affected me a lot, or I think it has. I’ve, either way, adopted it and listened to him (...) because I have confidence in him. (...) I guess I’ve changed my attitude towards animal experimentation because I know more now (...). I see the nuances now.

\textsuperscript{28} In sections 5.1.3, 5.1.4 and 5.1.5 we recognised that Sara had “hardened” and become more “cynical” with regard to using animals in education.
5 Attitudes and Identity Construction

The Three R’s and Pain Relief

The ethical debate in Chapter 9 in Forsøksdyrlære (2004) is discussed throughout six pages in short sequences, and is meant to generate awareness among the students on pressing ethical dilemmas. Talking to the students about the ethical issues raised during their education, the Three R’s\(^{29}\) were most frequently mentioned. The Three R’s stand for reduction, refinement and replacement, and are meant to provide ethical guidelines for how to use animals for research purposes. According to what is written in the compendium, these guidelines will generate questions such as: Do we need to use animals in research? Have we considered alternatives? Is the experiment extensively planned? Have we provided enough anaesthesia and pain relief? Questions that are meant to cause a moral awareness on behalf of the animals used in the experiments.

The importance of the Three R’s as ethical guidelines, and how they are developed within a medical scientist discourse with a specific concern for pain, is quite interesting when comparing it to how the butchers in Vialles’ study (2002) would relate (or disassociate themselves) to the killing of animals: the use of anaesthesia would alleviate the moral guilt of killing an animal because anaesthesia is not really fatal (2002: 45). The use of anaesthesia is one of the most important arguments posed by the medical scientist stand – and also many of the veterinary students – in why it is morally defensible to use animals as scientific models in experiments. The ethical dilemma animal experimentation poses to the students was in most cases connected to pleasure and pain\(^{30}\). If the students were unsure if the animal could feel pain or not, the experiment posed a moral dilemma:

\(^{29}\) Russel and Burch formed the Three R’s in 1959, and have been the most prevalent ethical guidelines among researchers conducting animal experiments. The Three R’s consist of: Replacement: Find out if there are alternatives and use them if they exist. Refinement: Make sure that the animals that are used are kept in optimal and constant environments and that they are carefully taken care of before, during and after the experiment. Also make sure that the most suitable species are being used. Reduction: The number of animals can be reduced through replacement and refinement, and by a careful planning and structuring of the experiments and the statistics (Engh & Hem 2004: 65).

\(^{30}\) It is possible to draw similarities between the students’ focus on pleasure and pain to Peter Singer’s utilitarian position. For Singer, value is measured in terms of pleasure and pain. The aim of ethical behaviour is to maximize pleasure over pain. This position indicates that for an animal to have moral relevance, it needs to have subjective experience – or interests (Singer 1975: 9-10). I will not discuss the students’ position in the overall ethical debate on animals’ moral relevance; however, it is interesting to see how their attitudes in many cases are consistent with the animal welfare movement.
Lisa, 5th year student: (...) sometimes we have had to struggle to get anaesthesia, especially on production animals. [Because the professors] are very concerned about using anaesthesia in those circumstances. [The animals] are injected with something like [ordinary pain-killers], but [the students] would rather give them morphine or something, because we think the animal is in pain. (...) But then it's been some discussions [because] they're not allowed to use [morphine] on animals that are going to be slaughtered. So it poses some problems with regard to using anaesthetics (...).

The presence of pain takes on moral relevance when fused with the capacity of human deliberation (Ariansen 1997: 24). Many of the students empathize with the animals used in education, and feel a moral obligation towards them in that they do not want them to suffer. The use of anaesthesia, thus, helps alleviate some of the moral pressure when conducting animal experimentation.

Aside from the Three R’s, many of the students that have terminated the course on Laboratory Animal Science could not remember the ethical discussions as being part of any of the lectures, even though the chapter on ethics is on their curriculum. However, this does not mean that the students (or the school) do not care about ethical issues, or that they find the use of animals in their education to be without tribulations. The general sentiment among the students actually seemed to be a desire for more ethics to be incorporated into several subjects, or even as an independent subject. This can be interrelated with the fact that many of the students, regardless of how far they have come in the education, seem unsure of how to relate to the use of animals in education.

**5.2.2 Compromising Ethical Assumptions?**

The primary ethical concern of the thesis is how ethics is intertwined with how we assert values to certain objects, because the concept of *constitutive value* focuses on how identification and valuation are interconnected with how we relate to our surroundings. The claim that students who experience the use of animals in education and at the same time sympathize with the medical scientist discourse. The discrepancy in student attitudes have been emphasized several places in the thesis.
as an ethical dilemma, generating an “identity crisis”, is consistent with the belief that certain properties of animals are taken to be central to animals’ identity, and this description of animals reflect the corresponding identity of the student. The idea is that a constitutional value sustains the identity of a person (Ariansen 1997: 34). If the student then recognizes animals used in experiments as valuable in the sense of having moral obligations to them, this creates an ethical conflict. Thus, the student’s identity is constituted by what animals are considered to be and what kind of qualities that are essential to these animals. If an animal initially is regarded as a “naturalistic animal” (Lynch, 1988), the constitutive value of the animal to the student is reflected in the resisting and conflicting questions of: “what kind of people can inflict harm on other animals? Who do we think we are?” (Ariansen 1997: 33). These questions, however, are not included in the ethical discourse provided by the NVH. The school reflects a sense of “we are the people who, with the best intentions and purposes, perform animal experimentation, with a primary ethical concern on reduction, refinement, and replacement”. Ethical consolation is provided to the students through promises of no infliction of harm on the animals, and that animal experimentation will ultimately benefit both humans and animals. By accepting the school’s definition of animal experimentation, such an ethical justification relieves the moral pressure on the students.

Regardless of the ethical consolation, several students have felt that they have had to compromise their basic ethical assumptions by using animals in education in terms of conducting animal experiments. The students conveyed their concerns primarily through emphasizing their dislike and discomfort in using animals in education – making it difficult to determine the “degree” of moral obligation the students felt in relation to the animals. Nevertheless, a dislike and a discomfort in conducting experiments can still indicate that ethical assumptions are compromised, and that as a consequence of the compromise, a construction of identity has taken place. The students are subjected to discourse and are in this sense constrained to accept or reject the new frames of reference. Nora explains her point of view:

31 See section 3.2 “Animals in a Conceptual Context” for a definition on the concept of “naturalistic animal” (Lynch, 1988).
Nora, 5th year student: (...) [I feel I’ve compromised my ethical assumptions], but [on the other hand] I haven’t refused (...). I’ve felt that some of the experiments have been disrespectful to [the animals in question].

Similar to Nora, Signe stated that she thought some of the experiments were morally objectionable, but found it difficult, or somewhat useless to object to them:

Signe, 3rd year student: (...) In the beginning you were just glad you had been accepted to the education, and that is in a sense the mentality; you don’t say anything because you are so happy that you have been accepted. (...) But it’s supposed to be possible to get through the education without conducting any experiments, I know people that have done it, but [the school] look at you a little bit [she makes a face]: Why aren’t you a part of the class, and [stuff like that]. (...) I guess there are good intentions behind [the experiments], (...) but I felt it was unnecessary… or a little immoral. (...) But often there are experiments with only one animal, with the whole class observing; what are you supposed to do? No, I don’t want to look; I want to go out of the room. They will kill the animal anyway (...). The whole class have to protest, and that’s not happening, so it’s a little bit… (...) It has become so accepted.

Thus, students have reluctantly taken part in the experiments without protesting. First, because they felt that the experiments were made indisputable. Second, they did not know about the option to try alternative means of experiments (the knowledge and information or how to get that information is not very accessible for the students, as Lisa (5th year student) could convey: “You do not receive much information from this school. It’s almost non-existent”). And/or third, they felt it would be frowned upon to refuse, both by fellow students and by the professors (the few students that openly deny to participate in experiments conducted on animals killed for the sole purpose of the veterinary students’ teachings, is most often negatively categorized as an animal activist or extremist, according to many of the informants. I discuss the problem of stigmatisation and how this disables many to oppose the use of animals in education in section 5.3.3). The conflicting ethical outlooks, thus, emerges in the animal laboratory, and as discussed in section 5.1.3, the students’ narratives reveal a sense of insecurity and indecisiveness regarding the
use of animals in education, which again reflect how values and ethics play a part in the change of attitudes and construction of identity. Marthe’s narrative reflects this indecisiveness when we talked about the ethical dimension of the use of animals in education:

Marthe, 3rd year student: (...) As long as they’re not in pain I guess it’s ok, but I’m a little… [Pausing]. I can’t really decide. I have thought about it, but I don’t know. We have to learn, so (...) maybe we can help more animals later when one is put to death [now]. In that sense I think it is ok.

Me: Do you think it is an ethical dilemma?

Marthe, 3rd year student: Yes, I do

Even though Marthe would not elaborate her answer on why she feel the use of animals in education is an ethical dilemma, the desire for ethical consolation and justification seems to be significant, which further reflect how ethical assumptions are challenged in the new context. As Linn stated:

Linn, 2nd year student: (...) Ethics (...) in connection to what we should do and what we’re going to carry out is very important, among other things not to loose the perspective I was talking about. I think it’s very important and we should have more of it. (...) I think we should have a lecture on ethics (...), for instance, before every dissection. (...) It should be obvious that you shouldn’t joke around and play with dead animals and that you should treat animals with respect, but you actually need to be reminded of this when you deal with it to that extent, and maybe get the perspective that we are working with something that has once lived and belonged to someone, and that have had thoughts and feelings.

The question of ethical issues in relation to attitudes and identity construction is evidently an important one. The students interact with animals in an unfamiliar context, and it is natural that questions would emerge regarding how to relate to animals in such settings, and also what an ethical treatment of animals would indicate. The main dilemma in using animals in education is consistent with the students’ initial attitudes towards animal experimentation, and consequently,
generates conflicting ethical discourses. Below are two additional statements given by two of the students when asked if they felt they compromised their basic, ethical assumptions by using animals in education, particularly in terms of conducting animal experimentation:

Grete, 3rd year student: (...) Yes, I feel that I do. (...) I would rather not do it if I didn’t have to. (...) You know, we have so much to do at school that we don’t bother to engage ourselves that much. (...) But I feel that I don’t want to do it, but I do it… That’s in a sense double standard. (...) I was more against animal testing because of principles prior to [school], because I knew less about it. I thought it was (...) more pain. I pictured what we see in the media; rabbits with big red eyes and stuff like that, but now there are so many requirements and guidelines (...) and as they say: do you rather want to close up little boys in a room to watch stuff? But that doesn’t necessarily justify it either.

Rita, 5th year student: (...) Yes, I would rather not do [animal experimentation], but we could have refused, but I wasn’t one of them, or we could apply to be exempted from [the lectures]. It was one girl in our class that did that. (...) I thought I would follow the lectures, but I didn’t like it, but again, I haven’t lost any sleep, it wasn’t that bad. But I wouldn’t have done it of my own free will.

At this point there is a need to make a quick stop. The last narrative is very interesting, and constitutes what will be argued in the following section on power, discourses and the rules of conduct. Rita says that she would have liked to be without the experiments done on the animals in education, but that she chose not to refuse. At the same time she says that she would have refused if she felt that she had a choice. The narrative reflects how she feels subjected to the rules of conduct, and how she has to compromise her own basic assumptions on what she feels is ethically right and wrong, something that is reflected in many of the narratives. The compromise of ethical assumptions is not the case for all of the students; nevertheless, it still reflects how discourses generate a change in attitudes and construction of identity.

Mia differentiates between animals that have died for the sole purpose of being used in education, and animals that have been donated and given euthanasia as
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a consequence of other medical circumstances. According to Mia, the latter ones do not pose an ethical dilemma:

Mia, 4th year student: (…) You shouldn’t go around putting animals to death at all times for the sole purpose of the students, but like I mentioned, it hasn’t been a lot of that going on. (…) Of course if it had been like: now you are going to have this and this subject, and we will therefore kill these nice, healthy animals for your sake, then I would’ve had a problem with it, that would’ve been ethically wrong.

Some of the other students also felt in one sense at ease with the use of animals in education, most often referring to the justifications made by the school (and as reviewed in the previous section) on why and how the animals are treated and used. However, simultaneously as they accepted most of the experiments, all of the students seemed to have something to object to when it came to certain ones. They often highlighted a couple of experiments that they had reacted to more strongly than others, and had made them feel that they were crossing ethical boundaries. They reacted to these experiments both because of the lack of necessity and relevance to their education, and thus made them feel they wasted animal lives, and also because they were unsure if the animal could feel pain or not. The infliction of pain was an ethical dilemma all of the students agreed upon – an experiment was never indispensable if the animal was inflicted with pain. I argued previously (5.2.1) on the role of anaesthetics when killing animals, and how the use of such pain relief often relieves the moral dilemma of using animals as scientific objects (Vialles 2002: 45).

Thus, the conflicting dilemmas involve the constitutive values the students identify internally in the animals and how animals are positioned in the overall social context (Ariansen 1997: 33). The conflicting dilemmas also involve the rules of conduct regarding expectations on how veterinary students should conduct themselves, dilemmas that might after a while generate a change in identity among the students. I earlier quoted Ariansen in that: “all understanding and all identification involves placing the object of understanding into a frame of meaning” (1997: 35), a statement that further indicates that a change or a shift in understanding can help see the animal in a different frame of meaning. Thus, if a change in ethical
outlook takes place, this indicates that the students have a new frame of meaning, a new discursive frame of reference. They have accepted a new definition of what animal experimentation is and essentially what an animal is.

Some Conclusive Remarks

In this section it has been important to emphasize the ethical aspects of dealing with animals in education, and how the school’s agenda and the students’ own views have been subject to negotiation in the course of their education. Much of the ethical aspect of the students assumptions have been implicit in the students’ narratives, illustrated by words such as “dislike”, “discomfort”, and so forth, but have still reflected how the students’ initial “moral regime” have been challenged through interacting with animals in unfamiliar contexts.

I have argued that the dilemmas that have emerged for many of the students, is consistent with the school as a producer of discourse. This has not been made sufficiently clear, and I shall, thus, continue the discussion of power, discourses and the rules of conduct that are part of the students’ everyday lives, and how power relations contribute to a negotiation, renegotiation, production and reproduction of the student identity (Jenkins 1996, 2004).

5.3 Power, Discourses and the Rules of Conduct

(…) Power must be analysed as something which circulates, or as something which only functions in the form of a chain. (…) Individuals are the vehicles of power, not its points of application (Foucault 1980: 98).

Power relations and the discourses proved itself to be one of the most important aspects in determining how and why the identity and attitudes of the veterinary students’ change towards animals at the course of their education. The importance of recognising such relations became evident already in the first interview conducted with the students, and it permeates the entire project. In one sense it has been difficult to “save” the discussion on power relations until the end of the project, because power relations have been present as important generators in both the role of
animal experimentation (5.1) and the role of ethics (5.2) in the construction of identity among the veterinary students. However, it has been important to focus on animal experimentation and ethical dilemmas as imperative determinants in the construction of identity, and not just as irrelevant pieces in the puzzle of power.

In the following section, I focus on different aspects of the Norwegian School of Veterinary Science that help constitute their educational agendas, and consequently produce discourses within which the students interact. In a Foucauldian tradition, power in the present project is not understood as an institution or a structure (1980, 1984), power is rather understood as force relations already existent in society and reproduced by institutions such as the Norwegian School of Veterinary Science. Power is in this sense used to discipline the individual, and is consistent with a set of strategies, procedures and ways of behaving which are associated with the specific institutional context (Mills 2005: 44). I will, consequently, examine two different rituals that are acted out in the enrolment of the students, rituals that symbolically transform the students from being part of the overall society to entering the world of animals and veterinary science. In the second section, I focus on manifested and unwritten laws, and how these create a subtle form of power, shaping the students attitudes and generate a construction of identity. In the third and last section, I examine how the students act as social agents with regard to opposing the use of animals in education, and how resistance might be avoided by the students as a result of the availability of alternatives and widespread lack of acceptance, and consequently, connote social stigmatisation.

5.3.1 The ‘Secret Rituals’

The Norwegian School of Veterinary Science had its official opening in 1936, and prior to this, veterinarians operating in Norway had primarily been educated in Copenhagen, Denmark. Even though the school is somewhat young compared to many other educational institutions in Norway, it still reflects a great sense of traditionalism. Not just because of the buildings and the interiors, as described in section 3.3 and 5.1.1, but also because of the organizational structure and the use of rituals in the enrolment of the students.
5 Attitudes and Identity Construction

The rituals can be regarded as initiation rituals, and some of the students described the more solemn one – “St. Blazius and his herdsmen” – as secret and hush-hush. However, others did not hesitate to talk about either of the rituals, and the first time I heard of them it seemed intriguing, because this is not something that is common courtesy at Norwegian universities in general.

The first ritual is about the school’s guardian angel, St. Blazius, and was actually founded by a student at the NVH in 1945. Today, the organizers are one administrative employee at the NVH and some of the older students (the candidates) at the school. The ritual has as its objective to render the moral code of the veterinary profession to the new students. As one of the students would reminisce:

Mia, 4th year student: (…) It’s about St. Blazius and his herdsmen. It’s a ritual and it’s very funny. [The professor and the older students] comes in wearing cloaks and [they] chant. (…) It was very solemn. (…). [They] come in wearing velour and a stick, (…). Then you have to drink from a test tube containing something that looks like blood.

The professor is acting the part of St. Blazius, and the students are his helpers and herdsmen. When they enter the room in dark cloaks, some of them carry an ancient skeleton of a horse, and they are chanting lyrics and texts sounding like a mix between Latin and Old Norwegian, and that are supposedly written during the Second World War. According to the students I talked to, the professor recites parts of the Animal Welfare Act, and the objective of the ritual is to assert the role of the new students approaching the position as protectors of animals. The ceremony is actually carried out both when they start school, and when they leave school as graduating candidates. At the end of the ritual the names of all the students are announced and they all receive their letters of matriculation, and everyone have to drink the “blood” from the test tubes.

Exactly how solemn the ritual is meant to be is unsure, but it still conveys in a symbolic mode the substance and the agenda of the NVH as an educational institution. As Jenkins states: “(…) symbolisation is always embodied in material

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32 In an article on the ritual of St. Blazius in Unviersitas 8th September 2004, a previous principal at the NVH and the only scientific employee part of the ritual says: “(…) when it comes to traditions among students, it doesn’t get more serious than this” (Vollset, 2004).
practices, in their products and in three-dimensional space” (2004: 138). It also embraces the students, and symbolises a transition from one identity to another, since rituals are meant to provide full membership of a collectivity, forming a move from immanent membership to actual membership. The transitional and changeable aspect of rituals is based on Arnold van Gennep’s (1965) idea that humans experience life as a series of transitions from one identity to another, and that these alterations are often ritualised to a greater or a lesser extent (cited in Jenkins 2004: 150). The ritual at the Veterinary School is less formal than many other rituals such as marriage and burials, but it still reflects and celebrates a move for the students from one sphere of life to another.

In addition to the ritual endowed by the administration of the school, the candidates arrange a less serious ritual for the newly recruited students. The ritual is called “Larve-laget” and, hence the name; symbolises the birth of the novel veterinarians. “Larve-laget” is supposed to be a humoristic and challenging ritual for the new students, made up of different tasks they have to act upon and silly pranks such as trapping them in cages and in gallows. The ritual is far from as solemn as the administrative one, but the symbolism reflected by the name and the students’ pristine identity as newborns or caterpillars, has the effect of incorporating them into their newfound area of interaction.

To analyse the use of rituals as an introduction to the veterinary education on a theoretical, abstracted level, there exist a consensus that rituals have an approximately tripartite form. The first is separation from the present state of identity; then there is a transition or liminality, meaning you are in a state of limbo, neither betwixt nor between (Turner 1995: 95); and last there is incorporation into the new state of identity. According to Jenkins, rites de passage and the internal-external dialectic of identification have a bearing on each other. This is because rituals offer an experience on a cognitive and an emotional basis, and thus, plays an important role in the internalisation of identification. In other words, it is a moment

33 In the article on the ritual of St. Blazius in Unviersitas 8th September 2004, one of the students interviewed says: “(…) it’s going to be wonderful to finally be a fully integrated student” (Vollset, 2004).
34 “Larve” means a caterpillar, and “Larve-laget” signifies a ritual for caterpillars.
35 Van Gennep (1965) defined rites de passage as “rites, which accompany every change of place, state, social position and age”.
in generating individual internal identification with external collectivity; “making the recruit feel that she belongs and is part of the greater organisational whole” (Jenkins 2004: 150-151).

In addition to this, the ritual might also distance the student from a previous identity, something that is reflected in the fact that several of the students felt that they had moved away from a more “unrealistic” view on animal research, to now being empowered with knowledge and realism\(^{36}\) - a new *regime of truth* (Mills 2004: 74). In a sense, the ritual is just a springboard in the process of separation and transition (because I will not suggest that these rituals are as instantly life changing as many other rituals can be said to be, but that it manifests and symbolises the beginning of a new era), and the students might feel neither betwixt nor between in large parts of their education. However after a while, at a certain point, and this differs from student to student, they are incorporated as actual members of the veterinary profession and veterinary discourses. This is, however, not a consistent claim, as neither of the students identified the rituals as specific sites of transformation. Nevertheless, it is likely that the rituals in themselves have great symbolic value in separating the students from their previous identity and incorporating them into a new area of interaction.

Both of the rituals can, thus, signify a separation from a previous identity, a separation that can weaken the existing internal self-identification, and reinforce the new ones. In addition to the rituals, the everyday interaction at and demands of the school can help uphold the new identity. For instance, the workload is, as already mentioned, huge, and demands of the students to spend most of their time at the school (many of the students talked about days consisting of ten to twelve hours with lectures and reading), making the separation from earlier way of life significant. Further, there are social events on a regular basis throughout the education:

Mia, 4\(^{th}\) year student: (…) It’s a lot of traditions (...). We have barn parties and matriculation parties, graduation ball for the candidates, [communal] breakfast at the 17th May, and Christmas parties (...). And we have all kinds of groups, so the people coming from other places [in the country] have enough to keep themselves busy. (…) It’s a very small school, and things like these are

\(^{36}\) See section 5.1.5.
organized in order to preserve [social relations]. (...) Everybody has to contribute with [his or her work force] on three events, and this is done by turns.

The idea that rituals help generate identities is connected to the fact that it creates a sense of, what Victor Turner calls “communitas” (1995: 96-97); it is an undifferentiated “we-ness”. Sara could identify that the traditions of the school in general could create a sense of belonging:

Sara, 4th year student: (...) there are many traditions, but I think it’s pretty ok. This might seem quite pompous, but it creates a sense of belonging (...). [The school] is very close; it’s very small and excluding. People know each other very well and you’re in each other’s faces all the time, especially your class (...).

Rituals are powerful and visible embodiments of the abstractions of collective identity (Jenkins 2004:151-152). It is possible to imagine that a traditional institution like NVH generates and reflects such a powerful, symbolic, organisational structure, and that the NVH wishes to “produce” certain kinds of students, in line with their organisational traditions. If we compare the school with other educational institutions, for instance the University of Oslo, it has a much stronger and much more closed set of structure. The possibilities of monitoring, controlling, and shaping of ideas and sentiments are much greater. However, a similarity exists, and a point that resonates with Foucault is that organisations contribute to the production of people, identified in particular ways – schools have “people-production” as their core business (Ibid: 161). The shaping of students, thus, through confining them to the specific rules of conduct and the organisational structures, help contribute to a change of his or her identity. This will be the focus of discussion in the next section.

5.3.2 Manifested Laws and the Rules of Conduct

As confirmed in the previous section, rituals can in many cases be said to be fundamental in generating a sense of “we-ness”: an imagined (not imaginary) community (Anderson, 1983). However, in the case of the NVH and the
veterinary students, the initiation ritual is more symbolic and situational; creating a sense of collectivity and a ceremonial start to new beginnings, than it is instantly life changing. Even though the Norwegian School of Veterinary Science cannot be said to be anything close to being an isolating and imprisoning institution, it is without doubt contributing to the construction of identity among the students through both manifested laws and unwritten rules of conduct. As established in Chapter 2: An institution is a pattern of behaviour that has become established over time as “the way things are done” (Jenkins 2004: 133), and these patterns include both written and unwritten rules of conduct. The purpose of this section is not to indicate that the students are guided through their education by venomous institutional rules, and that they mindlessly follow these rules without any sense of social agency or resistance. The section is more to emphasize the subtle power of discourses and rules of conduct, and when joining a collectivity were certain things are accepted and certain things are not, it will contribute to the construction, and consequently change, of identity. The organizational processes of identification help shape the students’ sense of who they are and their experience of being who they are.

According to Jenkins, the external definition given by others of “me” is an inseparable part of my definition of myself (2004: 25). This aspect of identity construction is a crucial one, reflecting how important it is to recognize the power of external definitions. The discursive frames for interaction set by the NVH, is an inseparable part of the students’ definition of themselves. The discourses outline, more indirectly than directly being subtle power relations, what it indicates to be a student at the NVH – what is expected and what is accepted. One example, reflecting both the sense of traditionalism and the rules of conduct, was when the EAEVE-report (2004) – as quoted previously – was published with the statement that: “The use of animals for teaching experiments in the pre- and paraclinical disciplines should be replaced by other forms of experiment”, because

(…) Although live animals have classically been used for teaching subjects such as physiology, this practice has now been replaced in most veterinary teaching establishments by other systems of experimental demonstration and investigation, such as self-testing, simulations and less traumatic animal
experiments. This has been done both for welfare reasons, and because they can more effectively illustrate the functionality of body systems. (EAEVE-report 2004, section 7.1)

After this report was published, the University newspaper *Universitas* went to the NVH to get a statement from the school on the subject. One of the professors in physiology hesitantly counter argued the report and said that to cut the use of animals out of the lectures will worsen the quality of learning. He also stated that the students needed to learn by using real organs, and that reality was far different from virtual reality, an argument that halted when some of the students stated that they most often only remember the animal and not the experiment. The school did take the report seriously and several animal experiments have been cut out since then, for instance in pharmacology (Eidem 2005: 6-7). Nevertheless, the statement from the professor still reflects a sense of traditionalism and hesitance toward renewal. It shows that traditional and conventional norms are hard to change. The students I talked to reflected this through some of their narratives. I asked some of the students about the information on the use of alternatives in the education, and if they felt that NVH was a traditional school, and this is what they answered:

Nora, 5th year student: (...) [The] leader of the [committee on the evaluation of the use of animals in education], is very good with alternatives, and he works at the animal research section, and when we are there he tells us a little bit about alternatives. And his wife has made some models and programs that you can use, but they are not being used. (...) I guess [the school] want to hold on to the traditions and that they think it is best as it is.

Sara, 4th year student: (...) [The school] is very close; it’s very small and excluding. People know each other very well and you are in each other’s faces all the time, especially your class. (...) It becomes very hierarchic with the people on top, and those who are the oldest in the classes, and… it was especially like that before, but it has improved the last year. But it’s nice. It’s a nice environment.

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37 See also section 5.1.3, where these issues were thoroughly dealt with.
5 Attitudes and Identity Construction

Lisa, 5th year student: (...) I feel that it’s very rigid; if you want to try to stress a cause it is very... I think it’s very hard to make [the school] listen. You can say what you mean and feel, but (...) nothing happens, I feel that they don’t listen (...). It’s very like: this is how we have always done it, and we are continuing to do it this way.

A claim in the thesis have been that the areas within which the students interact – areas such as (particularly) the school, part-time jobs with an educational agenda, and social structures and cultural sentiments at large – are influential in some way or another on how the students construct their identity and their attitudes towards animals. Interacting within the different contexts help constitute power relations, and consequently, generate a need for constant negotiation and re-negotiation of identity and attitudes. According to Foucault, it is in discourse that power and knowledge are joined together. Thus, discourses have the effect of becoming “truth”, regimes of truth that generates actions (1984: 97). The change of attitudes identified previously (5.1.4 and 5.1.5) with regard to the use of animals in experiments, indicate that the discourses of the NVH have become “truths” for the students. Hence, the institutional pattern of practice is, through manifested laws, rules of conduct, traditions and rituals, as shown above, part of constituting and reinforcing discourses and power relations between the students and the school. This is incorporated in rituals, social events, lectures and the provided curriculum, and it reflects such aspects as have already been mentioned: obligatory participation in animal experimentation and the teachings on ethics within a distinct medical scientist discourse. All of these aspects of the NVH as an institution help constitute the internal-external dialectic of identification of the students. The students’ narratives reflect how they can sense the traditional atmosphere of the NVH and that to object to animal experimentation will mean to go against the grain of the rules of conduct. The narratives also reflect how many of the students have accepted the school’s descriptions of how things “really are”, and consequently, recognised the school’s regime of truth. Thus, power relations and knowledge determine what definition counts, and because institutions can be said to be an integral part of the human world in which individuals make decisions and orient their behaviour, they become places where identity is “found” and “negotiated” in the process of “being” and
“becoming”; the students’ identity is produced and reproduced in the discursive framework of the NVH.

However, discourses are as inconsistent and unstable as is power, indicating that discourses can be contested by other discourses through resistance. Discourses can be an instrument and an effect of power, as well as a hindrance and a point of resistance, because discourses transmit, produce, and reinforce power (Foucault 1984: 100-101). This shows that an individual is not a passive recipient but a social agent that responds to discourses (Mills 2004: 40), and also that identities are social processes subject to negotiation, and could never be constituted through a “one-way operation”. I will subsequently discuss the role of the students as social agents, and how they help reinforce and reproduce discourses through their interaction, both with each other and the school at large.

5.3.3 Resistance and Stigmatization

Where there is power, there is resistance (…) and this resistance is never in a position of exteriority in relation to power. (Foucault 1984: 95)

Reactions conveyed by the students to their teachers and the school at large regarding the use of animals in the education have differed, and still differs, between the different classes. In section 5.1.3 Miriam could describe how her class reacted collectively to certain experiments, and posed their views in evaluation meetings\(^{38}\), and generated a new debate around the use of animals on their curriculum. Linn, on the other hand, states that, from her point of view, nobody in her class has had any “visible reactions” to the experiments they have conducted\(^{39}\): “Our class have not had any noteworthy reactions, while other classes have reacted strongly to [the experiments]”. Nevertheless, as most of the informants told me, there are always one or two or more of the students in each class that react, but do not necessarily act on his or her reactions.

\(^{38}\) Evaluation meetings are usually held at the end of a course or at the end of a term.

\(^{39}\) It is important to recognise that Linn’s class has only had dissections and a few experiments, because at the time of the interview she had just embarked on her second year.
The reactions from the students correspond with the discourses and the rules of conduct determined by the NVH as an institution, which again are intrinsically tied to a change in attitudes and a construction of identity towards animals and animal experimentation. In the present, I shall discuss how the students act as social agents, and explore the reasons for active or passive resistance, or the lack of it, with regard to animal experimentation. It is important to make account of power relations between the students and the school, in order to determine the effect of the discourses and the rules of conduct determined by the NVH.

In the section on ethical dilemmas (5.2), most of the students felt that at one time or more they had to compromise their ethical assumptions regarding the use of animals in education, especially animal experimentation. However, to what extent this was conveyed to the professors and the school at large differed considerably, and it seemed to be more the exception from the rule than the rule itself that objections were expressed publicly and formally. However, this does not indicate that resistance or objections toward certain use of animals were non-existent.

When the students are enrolled at the NVH, they have to sign several documents, one where they agree to follow the mandatory courses that include animal experimentation. The possibility to object to this clause is present, however the document say nothing of what the alternative means of learning could be. Not many students are aware of alternative methods of learning, or if this is even a possible approach to the veterinary profession. In this sense, there exist not only the perceptions of the “way things are done”, but also manifested rules that substantiate these perceptions.

The students can openly give response to the curriculum through evaluation meetings that take place once per semester. In addition to these meetings, there are also handed out evaluation forms after the end of every course where the students can anonymously evaluate the positive and the negative aspects of the terminated course. The professors and the recently founded Committee for Evaluation of the Use of Animals in Education take these evaluations into consideration, and the purpose is to create a more viable and learn effective curriculum. However, Nora, the student representative in the committee, stated that it happens time and again that the evaluation forms are not distributed, failing to receive feedback from the students:
Nora, 5th year student: (…) the students can fill out evaluation forms about the use of animals in education, (…) [but] they are not handed out (…). You have to download them yourself from the website. (…) But there was someone from one of the classes that took the matter into their own hands and handed it out to everyone in their class, and said that they had to fill in answers. They delivered the answers together, resulting in huge response [to the curriculum].

Most of the informants said that to resist conducting animal experimentation were most often felt as going against the grain of the collectivity. One exception was when an entire class (Miriam’s class, see 5.1.3) had collectively decided to make an organized protest through evaluation meetings. However, most of the students illustrated a different picture than the example of Miriam’s class on both the possibilities of objecting and the possibilities of using alternative measures, expressing that objecting to the use of animals in experiments was not the most accepted line of action:

Ane, 5th year student: [Those who reacted to the experiment] were a minority, but if you talk to most of [the students] they would say: yes, it was unnecessary to do it, and it could have been a better way, without necessarily involving the animal. But the lecturer argues that you remember better when it’s a living animal present, than with a computer model. (…) It’s not very accepted to protest (…). We have (…) a professional secrecy clause with regard to what happens at school and that we can’t run to the newspapers. But there are certain students that have done that; especially one student on several occasions has gone to the newspaper despite the student’s promise of secrecy. (…) It’s not the easiest thing in the world to protest, absolutely not, and it’s not very accepted either. But I think it’s more accepted that if you want to protest you go to the institute or the school, it’s frowned upon if you go outside the school to protest.

Grete recounts one specific incident when her class protested to an experiment:

Grete, 3rd year student: Active protest was maybe a third [of the class], but I think that if we have had a signed campaign it would at least have been two thirds that had felt it to be unnecessary, and that we had learnt just as well from
videos. Then the experiment had been conducted, but with one frog instead of twenty-five.

Me: How did the school take notice of the protests?

Grete, 3rd year student: [The protests] were received by the old professor in physiology that answered: well, well, we receive these protests every year. (…) He means that [animal experimentation] is important for learning and therefore it should be there. (…) I think [to be excused from the experiments] demands a lot of effort from the student.

Resistance has often been viewed as a relatively unambiguous category, in terms of the binary oppositions of domination versus resistance. In this sense, resistance has been considered to be organized opposition to institutionalised power (Ortner 1995: 174-175). Following Foucault, resistance is not something that exists outside the realm of power relations. Resistance is intrinsically part of power relations, and hence, indicates that there is no single locus of refusal (Foucault 1984: 95-96). Resistance as an analytical category with regard to the veterinary students’ reactions to the use of animals in education highlights the presence and play of power in most forms of relationship and activity (Ortner 1995: 175). When the students accept certain actions such as animal experimentation, despite their aversions, they also help generate and re-produce the discourses within which they interact. At the same time, by resisting animal experimentation, as some of the students have consistently done, new definitions of power relations are produced, and consequently, the “meanings” of the very subjects on whose behalf the workings of power are exposed, are elucidated (Ortner 1999: 158). Thus, resistance does not appear as a unitary force of opposition, and it is consequently essential not to regard it as simply opposing domination in the sense of mechanical re-action. It is therefore important in the thesis to analyse the internal conflicts of the students, and the production of meaning and values in the everyday interaction between the students, the school, and the animals that are used in education.

In addition to the hesitance to openly resist because of wary of the reactions from the professors and the school, many of the students themselves were sceptical to some of the people objecting, feeling that they traversed the school’s wishes and
5 Attitudes and Identity Construction

agendas, and that they represented a “certain group of people”. Those who were most known to hesitantly reject and refrain themselves from the lectures in question, were referred to as “the animal activist” and “the more extreme one in the class”. For instance, when asked about the process of protesting to experiments, some of the students would answer accordingly: Beate, 5th year student: “There are always one or two activists, on all levels”. Lisa, 5th year student: “We have one in our class that’s a real animal activist, (…) but I don’t know if she was exempted from [the experiments] or not”. Sara, 4th year student: “(…) I know that it’s been, and I’m sure still is, some real animal activists [here at the school], (…) but it’s much less of that than I thought it would be. I thought it would be a lot of vegetarians and that sort of thing (…) and that people would go around cutting up cages of animals used in fur production (…)”.

The ascription of identity can connote certain characteristics and bring with it certain consequences of action. Others do not only perceive our identity, they actively constitute it, and this is not just in terms of naming and labelling, but also in terms of how they respond to or treat us (Jenkins 2004: 73). Thus, the idea of internal-external dialectic of identification can be said to play an active role, and mirror the consequential aspect of identification.

Further, an ascription of identity, both by the school through manifested laws and unwritten rules of conduct, and the labelling of students by students as activist and extremist, can create “ideal types”40 (Weber 1949: 90-106), and can further contribute to a social stigmatisation with regard to saying “No” to conducting experiments. Stigmatisation is known to generate a subjugation of identity, which again can contribute to a lack of social agency. Several of the narratives portrayed in previous sections reflect how many students have refrained from speaking up in spite of aversions to the use of animals in experiments, because they were afraid or unsure of reactions from others. This was also the case for Nora when she wanted to protest:

40 “Ideal types” are, in short, abstract models of any particular collective pattern or form. Jenkins shows how Alfred Schutz (1967: 176-250) have expanded on Weber’s conception of “ideal types” and explained “ideal types” as abstract models of our contemporaries (in short, they can be understood as stereotypes); the descriptions of ideal types are based on our indirect experiences with people we do not know (Schutz, 1967 in Jenkins 2004: 120)
Nora, 5th year student: (…) the experiments were conducted just as I came to the school, so I wasn’t sure of how [to protest]. (…) I talked to some of the other students and asked them what they thought, and I said I felt the experiments were unnecessary. I guess I could have protested a little bit more (…).

As already stated, stigmatisation could also be identified as an issue among the students. Ane, who work in an animal laboratory besides school, explained that she sometimes feel unease with telling others that this is her part time job. For instance, the first reaction people most often express when she tells them about her job at the animal research facility is: “You are so cruel”. This reaction is, according to Ane, just as frequent among people in general as among fellow students. There exist a paradox in the students’ reactions: to identify objectors of experiments as extremists and at the same time regard an animal laboratory assistant as a cruel person, reflects what I have argued previously (5.1.1 “Animal Experimentation – Defined by Students”) on the conceptualisation of animals and animal experimentation. “Animal experimentation” and “the use of animals in education” are by many of the students considered to be two different matters – a discrepancy that is consistent with the fact that many of the students relate to animal experimentation through the images conveyed by the media, images that are often the most extreme incidents of animal experimentation. When the students “use animals in education”, on the other hand, the usage does not fall under the negative category of “animal experimentation” – primarily because of the extensive use of pain relief. Thus, how the students conceptualise animal experimentation contribute to both an ascription of identity to others simultaneously as constituting their own identity. The ascription and construction of identity also help reproduce the discursive frames of the NVH – constituting an internal-external dialectic of identification (Jenkins 1996, 2004).

The present section has portrayed that to go across the prevalent sentiments generates identification, and can contribute to staying silent rather than objecting to actions that are felt to compromise ones basic views. I have provided several examples throughout the chapter on the students being wary about resisting experiments, and narratives where they convey why they have chosen not to object. These conflicting discourses, being part of a society that are more and more aware of animal welfare issues and at the same time be part of medical scientist environment
where animal experimentation is valued as a highly competent research method, renders one stigmatised in almost any of the given situations.
6 Conclusion

: dissolving ethical dilemmas and changing constitutive values

To formulate generalizations on and draw a definite conclusion from the empirical material presented in the paper can be problematic. First, there is still so much (unexplored and unattained) material to be examined and worked on in order to provide a fully measured analysis. Second, the basis of fifteen conversations might be insufficient in determining a change of identity, particularly in view of the diversity found in the narratives of the students. Third, the lack of extensive and prolonged participant observation might for some critics be a decisive methodological concern. Nevertheless, dealing with human interaction and social constructions can leave any analysis incomplete; social processes and practices are in a constant flux – making it hard to draw unambiguous conclusions without leaving certain aspects unexplored. Further, the methodological concerns of the study have been extensively dealt with previously in the project, and any unsatisfactory groundwork in the present moment will only suggest the immediacy and the call for further inquiry on the issue at hand. And finally, it has not been a primary aim to make generalisations of all veterinary students and their relationships to animals without taking into account that the informants of the study are individuals, varying a great deal with regard to their knowledge and interpretations of their own social reality. Thus, the informants’ narratives are not necessarily transferable and consistent with veterinary students’ stories in general. The conclusions drawn in the present will, hence, make up a sub-total of the empirical, methodological and theoretical analysis offered in the current thesis.

At the outset of the project I had a working hypothesis that the act of experimenting on animals in the education of veterinary students – both direct and indirect participation and observation – would be the main factor in generating a construction of identity and changes in attitudes to animals and animal
experimentation. What I found intriguing (but not surprising) was to what extent the social practices and cultural sentiments at large are influential on how the students construct their identity and their attitudes toward animals. I have tried to elucidate how meanings, values, and identities are unfixed and, if they change, the students and the surrounding world also change – making available other possibilities for thinking and acting. The act of experimentation in itself can become “easier” over time in the sense that the students get used to conducting experiments and because they learn how to manage the emotional strains of using animals in this mode of action. However, the change is more connected to a change of ideas and assumptions related to what animal experimentation is, and when and why it can be an indispensable method of acquiring knowledge.

What was behind this change in becoming “realistic” – as many of the informants claimed – was embedded in two different social practices and effects: animal experimentation and power relations (including discourses and knowledge production), and the ethical aspects connected to these practices. The majority of the narratives given by the students reveal a sense of insecurity and indecisiveness regarding the use of animals in education, which reflects both the complexity of the issue, how values and ethics plays a part in the construction of attitudes and identities, and consequently that identity is always subject to negotiation.

Hence, I argue on the basis of the empirical, methodological and theoretical material presented in the thesis that the ideas and assumptions regarding the use of animals in education have changed as a result of dissolving ethical dilemmas related to animal experimentation, and consequently a change in constitutive values of animals used in these settings. The destruction of the idea that experiments conducted in education is an ethical dilemma is closely connected to the students being subjected to the rules of conduct provided by the school as an institution. The school presents new points of reference, a new explanation and a new “regime of truth” to the students of what it means to conduct experiments on animals for the purpose of research and education. The act of conducting experiments on animals is, consequently, seen in a different frame of meaning – or to be more specific in a medical scientist discourse – giving the animal a more instrumental identity. This is particularly reflected in some of the students’ narratives stating that they have been totally opposed animal experimentation before they started the veterinary education,
but now, when they “know better” and have a more “realistic” outlook on the
subject, they could say that experimenting on animals, in some cases, could be the
only viable research method. It is evident that in the process of becoming
veterinarians, the students are subjected to discursive frames of reference that have as
its primary objective to make the students equipped for the profession in sight.

In a context beyond the geographical vicinity of the Norwegian School of
Veterinary Science, and the students that are attached to this institution, animal
experimentation is a timely, compelling and pressing issue. It has been my objective
in the thesis to examine – in a micro perspective – the construction of identity and
changing attitudes of the students interacting with animals in unfamiliar (and often
undesirable) areas such as animal experimentation. At the same time, I have tried to
touch upon a larger debate of what place animals hold in contemporary society, and
the frequent disparity that exist in human relationship to animals. Human
consumption of animals – emotional, symbolic, and practical – leave animals socially
marginalized as “individuals” but at the same time celebrated as creatures that help
humans enhance their own social existence. The discrepancy in human relationship
to animals needs to be given a closer inspection for reasons that have both been and
not been evident in the present thesis, but nevertheless poses a realistic and important
demand.
Bibliography


Bibliography


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Bibliography


**Interviews**

The narratives used in the thesis are based on interviews that were conducted with 15 students at the Norwegian School of Veterinary Science in the period 24th August 2005 – 21st September 2005.

**Reports Published on the World Wide Web**


**Newspaper Articles**

Bibliography


Other Relevant Websites (last visited 22nd April 2006)


The Norwegian Animal Welfare Alliance (Dyrevernalliansen): URL: http://www.dyrevernalliansen.org

The Norwegian Regulation on Animal Experimentation: Available via URL: http://oslovet.veths.no/statute.html

The Norwegian School of Veterinary Science: URL: http://www.veths.no