ABSTRACT. Veterinarians have obligations towards both the animals they treat and their clients, the owners of the animals. With both groups, veterinarians have complicated relations; many times the interests of both groups conflict. In this article, using Q-methodology as a method for discourse analysis, the following question is answered: How do Dutch practicing veterinarians conceptualize animals and their owners and their professional responsibility towards both? The main part of the article contains descriptions of four different discourses on animals and their owners and on veterinarian professional responsibilities that prevail among veterinarians. The factual images veterinarians have of animals and their owners are connected to different moral questions and solutions to these questions.

KEY WORDS: descriptive ethics, discourse analysis, veterinary medicine, veterinary ethics, Q-methodology

1. INTRODUCTION: THE FUNDAMENTAL QUESTION OF VETERINARY ETHICS

Veterinarians serve two masters: animal patients and human clients (Tannenbaum, 1993, p. 145). The most fundamental question of veterinary ethics, according to Bernard Rollin, is: to whom does the veterinarian morally owe primary allegiance; owner or animal? (Rollin, 1988; 2004). Arkow (1998, p. 193) states that the profession has never resolved whether its primary responsibility is to the animal patient or the human client. On a daily basis, veterinarians need to respond to and negotiate the interests of the client, the patient, and the practitioner (Tannenbaum, 1985), interests that do not always coincide (Porter, 1989). Both animal patients and human clients often have legitimate interests and conflicting moral claims that flow from these interests (Tannenbaum, 1993, p. 143). Here, this issue is not studied by applying ethical theory and by framing ethical dilemmas of...
veterinarians in concepts and terms derived from ethical theory. This article centers on descriptive ethics: its main focus is on describing how practicing veterinarians frame their moral questions themselves. Using Q-methodology as a method for discourse analysis, the following question is answered: How do Dutch practicing veterinarians conceptualize animal patients and human clients and their professional responsibility towards both? The article describes the empirical discourses of Dutch veterinarians on animal patients and human clients. In doing so, it argues that it is valuable to study the moral dilemmas of veterinarians in the context of a veterinarian’s discourse (belief-system/paradigm/worldview) regarding the triangular relationship with animal patients and human clients; a discourse in which the moral questions of veterinarians are framed.

2. MORAL QUESTIONS FRAMED BY VETERINARIANS

Veterinarians meet ethical dilemmas on a day-to-day basis (Tannenbaum, 1993; Vlissingen, 2001; Rollin, 2004). According to Arkow (1998, p. 194), “It is impossible to escape ethical dilemmas in veterinary medicine. The practitioner is well-advised to prepare for changing cultural and client expectations of the 21st century.” Kellart (1989) has identified a typology of nine distinct values regarding animal welfare that are widespread in the general population of America, some of which are shared by veterinarians as well. Many of these values clash within the daily practice of practicing veterinarians, leading to ethical dilemmas and debate with colleagues and the wider population (e.g., animal rights activists). What to do when weighing the competing animal and human interests is often far from easy, even when there is consensus about the interests of the parties involved?

For example, most people would probably agree that companion animals have a legitimate interest in receiving good veterinary care. Veterinary medicine can now provide extremely sophisticated procedures (including open heart surgery, cancer chemotherapy, and orthopedic surgery) that are clearly in the interests of many veterinary patients. Yet some of these procedures cost hundreds or thousands of dollars, and can present enormous economic burdens to animal owners (Tannenbaum, 1993, p. 145).

To make matters even more complex, next to the interests of animal patients and human clients, veterinarians have to consider many more interests, such as their own interests (commercial; the veterinarian needs to make a living), the interests of the animal population (absence of animal diseases) and the interests of society at large (veterinary hygiene and public health).
In the field of human medicine, much has been written on the doctor-patient relationship. However, the literature that exists on tensions for veterinarians that arise from conflicts between animal and animal owner, is much scarcer. Especially, empirical and descriptive literature is very rare. Some scholars maintain that veterinarians might find the philosophical framing of moral dilemmas troublesome (cf. Rollin, 1991); Arkow (1998, p. 193) states that, “As a general rule, veterinarians are ill-prepared to confront ethical debates. The practitioner may be excused if he or she finds moral dilemmas uncomfortably troubling. Trained first in science, veterinarians may be frustrated by philosophical questions which are not amenable to empiric resolution.”

Tannenbaum (1993, p. 146) mentions three impediments for the veterinarian who seeks a coherent ethic of human-animal interaction: “(1) disagreement regarding the value of animals, (2) lack of sufficient empirical information about animal capacities, and (3) disagreement about the meaning of psychological terminology.”

In the descriptive literature on the veterinarian-animal relationship, the tension between dealing with animal patients and human clients is not the focus of most research (Swabe, 1999; Arluke and Sanders, 1996). One of the interesting exceptions is an ethnographic study by Gauthier (2001), who explored the techniques veterinarians use to neutralize ethically legally problematic lapses in the performance of their professional duties. Gauthier concludes that through the use of various neutralization techniques, veterinarians make possible behaviors that outsiders to their circumstances might question on legal or ethical grounds. Much of the rest of the empirical literature concentrates on the human-animal relationship in general (Arluke and Sanders, 1996; Becker, 1997).

Empirical studies of how veterinarians frame moral questions and how they deal with daily (moral) dilemmas in their work are rare. Tannenbaum (1993, pp. 151/152) argues, “Progress resolving ethical issues confronting veterinarians will also require greater interest by social scientists in the veterinary profession itself as a subject of empirical research ... Further research about the moral values of veterinarians and veterinary students is needed. Only by learning how present and future practitioners view their moral obligations to animals and people will we know what issues are important in the profession.” An attempt to do just that will be made in the remainder of this article.

---

2 In human medicine many empirical studies have been done. See Schermer (2001).
3 This indicates how important it is to study the moral issues of veterinarians in their context. Moral decision-making is situational. When studying moral decisions, the context is of extreme importance. Due to the nature of language, abstract formulations derived from philosophical theories can easily lead to disparity with the circumstances in which a person has to make a decision (Hoffmaster, 1992, p. 1422).
3. DESCRIPTIVE ETHICS AND DISCOURSE ANALYSIS

The conceptualization by veterinarians of animals and their owners is morally important, because these conceptualizations influence (strongly) the way veterinarians treat animals and their owners. Here, moral issues of veterinarians are described by studying the way they talk about and view reality: their discourse on animal patients and human clients.

Discourses necessarily contain both facts and values (e.g., Foucault, 1978; Hajer, 1995). Moral elements and factual statements are inextricably joined within a discourse (de Graaf, 2001). The way one looks at the world and the way one perceives facts necessarily determines the way one values. The “is” and “ought” influence each other in countless ways. In our daily lives, we jump so often between normative and factual statements that we do not realize how much our views of facts determine whether we see problems in the first place. But when we study our discussions more carefully, we can see that the “is” and “ought” are intertwined. According to Tannenbaum (1993, p. 147), “Many disagreements do not rest on the perceived value of animals, but upon differences what, in fact, animals are capable of experiencing.” “Animal welfare” is not a certain state of the animal that can be described objectively by scientists (Tannenbaum, 1991). This makes the conceptualization of an “animal” by a veterinarian ethically interesting. The way veterinarians talk about animals (e.g., amongst each other, not in promotional statements), speaks volumes about the way they treat animals.

According to Tannenbaum (1993, p. 152), as servants of both human and animals’ interests, veterinarians have always faced difficult ethical questions. Which particular dilemma a particular practitioner perceives, however, and how he or she frames the moral question he or she recognizes, differs among veterinarians. Veterinarians who use a discourse similar to that of animal rights activists, for example, will ask themselves different moral questions than veterinarians who use a discourse in which the allegiance is clearly first and foremost to the human client. Whether either view is better in a moral sense is not the issue here; the issue is that different discourses lead to different moral questions. Therefore, it is interesting that veterinarians see themselves facing moral choices. Moral questions framed by veterinarians, are likely to differ from moral questions framed by professional ethicists (Schön and Rein, 1994).

In a specific discourse, different moral questions are raised than in others. As soon as managers of soccer clubs start to talk about soccer as a “product,” a relatively new development in Europe, a new world opens up around the same old game with new opportunities, managerial problems, and new moral issues (Hawkes, 1998). Discourses do not only help us understand that a certain moral question is asked, they also give us the
spectrum of possible solutions to those moral problems, i.e., what is or is not seen as a viable solution to a specific moral problem. Hajer (1995, p. 54): “Discourse analysis investigates the boundaries between ... the moral and the efficient, or how a particular framing of the discussion makes certain elements appear fixed or appropriate while other elements appear problematic.” A problem definition inevitably predisposes certain solutions, and vice versa (Eeten, 1998, p. 6; Wildavsky, 1987; Rochefort and Cobb, 1994; Kingdon, 1995). According to Schön and Rein (1994, p. 153):

When participants ... name and frame the ... situation in different ways, it is often difficult to discover what they are fighting about. Someone cannot simply say, for example, “Let us compare different perspectives for dealing with poverty,” because each framing of the issue of poverty is likely to select and name different features of the problematic situation. We are no longer able to say that we are comparing different perspectives on “the same problem,” because the problem itself has changed.

Asking a (moral) question assumes knowing what would constitute an answer to it.

A discourse analysis can identify the rules and resources that set the boundaries of what can be said, thought and done in a particular context or situation, what Foucault (1978) called “the conditions of possibility” of a discourse. “Thus, if we are to comprehend how decisions are made ... it is by examining the conditions of possibility in relation to which these statements are formulated, that is, the often implicit institutionalized speech practices that guide what is and what is not likely to be said (Bourdieu)” (Mauws, 2000, p. 235).

It is beyond the scope of this article to discuss (the different forms of) discourse theory in more detail (For more on discourse analyses, see e.g., Dijk, 1985; Putnam and Fairhurst, 2001; Titscher et al., 2000).

Tannenbaum (1995, pp. 14–15) has described veterinary ethics as having four branches: Normative Veterinary Ethics, Descriptive Veterinary Ethics, Administrative Veterinary Ethics, and Official Veterinary Ethics. In this article, the main focus is on the second branch: here it is studied what practitioners think that ought to be done; their discourses on animal patients and human clients are described. Which discourses can be discovered among Dutch veterinarians on animal patients, human clients, and their relationship with both? The discourse descriptions have to be very broad. All the opinions of a person somehow relate to each other. That means that when talking about food animals (cf. Herrick, 1997; Humble, 1998), for example, a view about intensive animal husbandry is part of the discourse on animal patients and human clients. A veterinarian working on farms that practice intensive animal husbandry treats diseases that are partly related to the practice of it.
4. RESEARCH BACKGROUND AND Q-METHODOLOGY

To focus this study and to lessen complications introduced by the differences between different types of veterinarian practitioners (like companion animal practitioners, large animal practitioners, equine veterinarians, pathologists, etc.), all of which face unique ethical issues, this study is limited to farm animal veterinarians. An interesting aspect of this field is the economic interests of the animal owners: farmers earn their livelihood from their animals, which, of course, influences the relationship they have with their animals.

Here, Dutch veterinarians are studied. In Holland, the Faculty of Veterinary Medicine in Utrecht is the only veterinary medical school in the country, so nearly all Dutch veterinarians have studied there. In this study, also variables like graduation date, gender, and geographical place of practice are considered. However, since the veterinarians were not selected in a purely random manner, conclusions from an analysis of variance for this group should be drawn with caution.

There are various ways to investigate the discourses of veterinarians. Here, Q-methodology is used to analyze the discourses. The instrumental basis of Q-methodology is the Q-sort technique. As Steven Brown writes about Q-methodology (cited in de Graaf, 2003, p. 65):

---

4 Students who graduated before 1990 did not have courses on ethics in their curriculum; they had only had technical courses. Now, all students have a mandatory course in the fourth year called “Veterinary Medicine and Society” and in the first year, some attention is given to the moral aspects of veterinary medicine. This is not to say that such a course necessarily has an influence. Also when ethical issues are not explicitly discussed, the training of veterinary students provides ample exposure to ethical issues in the profession (Herzog et al., 1988, p. 187). Blackshaw and Blackshaw (1993) concluded that by their final year, Australian veterinary students have developed some sensitivity in the area of the human-animal bond, which may have been aided by the courses the students received in animal behavior and welfare.

5 For many years, there were few female students at the Faculty of Veterinary Medicine in Utrecht and thus most veterinarians in Holland are male. Interestingly enough, approximately eighty percent of current students are female. One of the reasons for this is that female students (in general) have, on average, higher secondary school grades, which increase chances of admission.

6 Animals are not uniformly distributed within the Netherlands. In the province of Brabant, for example, the sandy, rather infertile soil means there are relatively more pigs and fewer dairy cattle. The type of animal a veterinarian treats might influence his or her way in conceptualizing animal patients and human clients.

7 This is named as a possible method to describe discourse in Dryzek (1990, p. 187). Examples of successful discourse analyses using Q-methodology include Dryzek and Berejikian (1993), Thomas et al. (1993), Eeten (1998; 2001), and de Graaf (2001).

8 Dryzek and Berejikian (1993, p. 52) state, “Q study will generally prove a genuine representation of that discourse as it exists within a larger population of persons...To put it another way, our units of analysis, when it comes to generalizations, are not individuals, but discourses. The discourses are examined without pre-developed categories by the researcher. On the contrary, Q-methodology gives researchers the opportunity to reconstruct the discourses in their own words using only those spoken by individuals involved in the discourse.”
Most typically, a person is presented with a set of statements about some topic, and is asked to rank-order them (usually from 'agree' to 'disagree'), an operation referred to as 'Q sorting.' The statements are matters of opinion only (not fact), and the fact that the Q sorter is ranking the statements from his or her own point of view is what brings subjectivity into the picture. There is obviously no right or wrong way to provide "my point of view" about anything – health care, the Clarence Thomas nomination, the reasons people commit suicide, why Cleveland can't field a decent baseball team, or anything else. Yet the rankings are subject to factor analysis, and the resulting factors, inasmuch as they have arisen from individual subjectivities, indicate segments of subjectivity which exist. And since the interest of Q-methodology is in the nature of the segments and the extent to which they are similar or dissimilar, the issue of large numbers, so fundamental to most social research, is rendered relatively unimportant.

Q-methodology was applied to the study through a number of steps, which are discussed only briefly here. First, ten open interviews were conducted with veterinarians. In these taped interviews, the veterinarians were invited to talk about as many aspects of their relationship with animals and their owners and the possible conflicts with them as their time would allow. All literal statements about animals and their owners were later transcribed. After the interviews, there was a list containing about 150 statements. All (largely) overlapping statements were discarded. From this collection, a sample of fifty-two statements (in Q-methodology this is called the Q-set) were selected to be used in subsequent interviews with forty different veterinarians (the P-set; Brown, 1980, p. 192).

Next, the forty respondents, the Q-sorters, were selected. The contacts with the first veterinarians were made with help from the Faculty of Veterinary Medicine in Utrecht. From those initial Q-sorters, the names were asked of colleagues who might have different opinions. (Making sure all the relevant points of view are taken into account is most important to a Q-study. This differs from random sampling theory.) Each Q-sorter was asked to perform a Q-sort, the statements were ordered by the veterinarian according to a fixed distribution (see Table 1).

---

9 The main source for Q-methodology is Stephenson (1953). Within the social sciences, Brown (1980) is a classic.

10 The average interview lasted about one and a half hours.

11 To check the representativeness of the statements, respondents were asked if any aspect of their relationship with animal patients and human owners they believed was relevant to their opinions were missed (Eeten, 2001, p. 396). The answers that were given to this question were mostly "no," confirming the sample's validity.

12 The P-set was structured: It was made sure that there were enough respondents from three geographical areas (the provinces Overijssel, Utrecht/Gelderland, and Brabant/Limburg), from both genders, from all age groups, and from small and large sizes of practice.

13 Even though a forced distribution was used, some deviations were tolerated. If the Q-sorters found the forced distribution too much unlike their positions, they were allowed to slightly vary the number of statements they were "supposed to" have in a category.
each respondent was asked to give his or her opinion about the fifty-two statements, by placing them on a continuum. The two statements he or she agreed with most were put on the right; the two he or she disagreed with most on the left. The statements they felt indifferent about (or did not understand) were put in the middle (the 0 category). The final distribution was the Q-sort.

The forty Q-sorts were analyzed using statistical methods. The idea was to look for patterns among the Q-sorts. Are there similar ways in which the forty veterinarians have prioritized the fifty-two statements? This analysis led to four different factors, termed A to D. For each factor, an idealized Q-sort is computed. This represents how a hypothetical veterinarian with a 100% loading on a factor would have ordered the fifty-two statements. This gives an impression of what a discourse is all about. Table 2 gives the factor loadings of all the subjects of this study, including their gender, workplace, and year of graduation.

5. THE FOUR DISCOURSES

The four factors in every group deliver the most important information to reconstruct four discourses. These discourses are different ways veterinarians conceptualize animal patients and human clients and talk about the relations with, what some of them call, “two types of customers.” When reconstructing the discourse, special attention was paid to the most salient statements and discriminating items. Also taken into account is how the statements are comparatively placed in the different discourses. Furthermore, after the Q-sorting, an additional interview was held. Questions were asked to gain more insight into the discourses by asking about the reasons behind the choices the veterinarians made. This helped with the final analysis of the different discourses. Literal remarks given when answering these questions are included in the narrative of the discourses. These remarks are presented in Italics. Within the discourse descriptions, only the opinions of veterinarians belonging to the discourse are expressed, not the opinion of

\[\begin{array}{cccccc}
\text{Least agree} & \text{Most agree} \\
\text{(Statement scores)} & & & & & \\
-3 & -2 & -1 & 0 & +1 & +2 & +3 \\
(2) & (5) & (11) & (16) & (11) & (5) & (2) \\
\end{array}\]

\[_{14}\] Here, a factor-analysis was used, which is standard in Q-methodology. First a centroid factor analysis produced different factors, which were then rotated according to the varimax rotation. Extraction of more than four would have led to statistically insignificant factors.
### Table 2. Subjects’ factor loadings.

<table>
<thead>
<tr>
<th>An</th>
<th>Bn</th>
<th>Cn</th>
<th>Dn</th>
<th>Gender</th>
<th>Year of graduation</th>
<th>Practice area</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05</td>
<td>0.34</td>
<td>0.19</td>
<td>(0.52)</td>
<td>M</td>
<td>82</td>
<td>B</td>
</tr>
<tr>
<td>0.31</td>
<td>0.33</td>
<td>(0.43)</td>
<td>(0.45)</td>
<td>M</td>
<td>78</td>
<td>B</td>
</tr>
<tr>
<td>0.00</td>
<td>(0.57)</td>
<td>0.03</td>
<td>0.02</td>
<td>M</td>
<td>67</td>
<td>B</td>
</tr>
<tr>
<td>0.39</td>
<td>(0.45)</td>
<td>0.04</td>
<td>0.21</td>
<td>M</td>
<td>72</td>
<td>B</td>
</tr>
<tr>
<td>(0.66)</td>
<td>0.01</td>
<td>0.18</td>
<td>0.41</td>
<td>F</td>
<td>93</td>
<td>B</td>
</tr>
<tr>
<td>0.37</td>
<td>(0.46)</td>
<td>−(0.50)</td>
<td>0.38</td>
<td>M</td>
<td>85</td>
<td>B</td>
</tr>
<tr>
<td>0.22</td>
<td>(0.49)</td>
<td>0.03</td>
<td>0.15</td>
<td>F</td>
<td>99</td>
<td>B</td>
</tr>
<tr>
<td>(0.67)</td>
<td>0.09</td>
<td>0.09</td>
<td>0.11</td>
<td>F</td>
<td>93</td>
<td>B</td>
</tr>
<tr>
<td>0.21</td>
<td>0.01</td>
<td>(0.45)</td>
<td>(0.52)</td>
<td>M</td>
<td>87</td>
<td>B</td>
</tr>
<tr>
<td>(0.63)</td>
<td>0.19</td>
<td>0.31</td>
<td>0.10</td>
<td>M</td>
<td>84</td>
<td>B</td>
</tr>
<tr>
<td>0.25</td>
<td>0.00</td>
<td>(0.54)</td>
<td>0.13</td>
<td>M</td>
<td>95</td>
<td>B</td>
</tr>
<tr>
<td>0.02</td>
<td>0.26</td>
<td>(0.50)</td>
<td>0.32</td>
<td>M</td>
<td>90</td>
<td>B</td>
</tr>
<tr>
<td>−0.04</td>
<td>0.22</td>
<td>(0.49)</td>
<td>−0.01</td>
<td>M</td>
<td>89</td>
<td>O</td>
</tr>
<tr>
<td>−0.02</td>
<td>(0.72)</td>
<td>0.26</td>
<td>−0.18</td>
<td>M</td>
<td>95</td>
<td>O</td>
</tr>
<tr>
<td>0.31</td>
<td>−0.04</td>
<td>(0.53)</td>
<td>0.12</td>
<td>M</td>
<td>71</td>
<td>O</td>
</tr>
<tr>
<td>−0.23</td>
<td>(0.63)</td>
<td>0.01</td>
<td>0.30</td>
<td>M</td>
<td>83</td>
<td>O</td>
</tr>
<tr>
<td>(0.47)</td>
<td>0.29</td>
<td>0.38</td>
<td>0.27</td>
<td>M</td>
<td>78</td>
<td>O</td>
</tr>
<tr>
<td>(0.51)</td>
<td>0.03</td>
<td>−0.07</td>
<td>0.39</td>
<td>F</td>
<td>98</td>
<td>O</td>
</tr>
<tr>
<td>(0.58)</td>
<td>0.24</td>
<td>−0.03</td>
<td>0.25</td>
<td>M</td>
<td>83</td>
<td>O</td>
</tr>
<tr>
<td>0.36</td>
<td>(0.47)</td>
<td>−0.01</td>
<td>0.22</td>
<td>M</td>
<td>98</td>
<td>O</td>
</tr>
<tr>
<td>0.42</td>
<td>0.26</td>
<td>0.15</td>
<td>(0.54)</td>
<td>M</td>
<td>88</td>
<td>O</td>
</tr>
<tr>
<td>0.33</td>
<td>0.40</td>
<td>0.20</td>
<td>0.34</td>
<td>M</td>
<td>83</td>
<td>O</td>
</tr>
<tr>
<td>(0.55)</td>
<td>0.10</td>
<td>0.06</td>
<td>(0.43)</td>
<td>M</td>
<td>78</td>
<td>O</td>
</tr>
<tr>
<td>(0.58)</td>
<td>0.19</td>
<td>0.27</td>
<td>0.10</td>
<td>M</td>
<td>92</td>
<td>U</td>
</tr>
<tr>
<td>0.09</td>
<td>−0.01</td>
<td>0.13</td>
<td>0.34</td>
<td>M</td>
<td>84</td>
<td>U</td>
</tr>
<tr>
<td>0.42</td>
<td>0.05</td>
<td>0.39</td>
<td>−0.09</td>
<td>M</td>
<td>91</td>
<td>U</td>
</tr>
<tr>
<td>0.23</td>
<td>(0.56)</td>
<td>0.32</td>
<td>0.00</td>
<td>M</td>
<td>96</td>
<td>U</td>
</tr>
<tr>
<td>(0.64)</td>
<td>0.07</td>
<td>−0.02</td>
<td>0.39</td>
<td>F</td>
<td>99</td>
<td>U</td>
</tr>
<tr>
<td>0.42</td>
<td>0.20</td>
<td>−0.06</td>
<td>(0.58)</td>
<td>M</td>
<td>73</td>
<td>U</td>
</tr>
<tr>
<td>(0.52)</td>
<td>0.18</td>
<td>0.11</td>
<td>0.12</td>
<td>M</td>
<td>97</td>
<td>U</td>
</tr>
<tr>
<td>0.13</td>
<td>0.26</td>
<td>(0.48)</td>
<td>0.22</td>
<td>M</td>
<td>70</td>
<td>U</td>
</tr>
<tr>
<td>0.17</td>
<td>0.00</td>
<td>0.05</td>
<td>0.37</td>
<td>M</td>
<td>91</td>
<td>U</td>
</tr>
<tr>
<td>(0.53)</td>
<td>(0.46)</td>
<td>0.10</td>
<td>0.11</td>
<td>M</td>
<td>99</td>
<td>U</td>
</tr>
<tr>
<td>(0.65)</td>
<td>0.09</td>
<td>0.16</td>
<td>0.18</td>
<td>M</td>
<td>79</td>
<td>U</td>
</tr>
<tr>
<td>(0.81)</td>
<td>−0.11</td>
<td>0.13</td>
<td>0.19</td>
<td>F</td>
<td>96</td>
<td>B</td>
</tr>
<tr>
<td>(0.75)</td>
<td>0.19</td>
<td>0.24</td>
<td>0.11</td>
<td>M</td>
<td>88</td>
<td>B</td>
</tr>
<tr>
<td>(0.56)</td>
<td>−(0.48)</td>
<td>−0.01</td>
<td>0.26</td>
<td>M</td>
<td>86</td>
<td>B</td>
</tr>
<tr>
<td>(0.64)</td>
<td>0.07</td>
<td>0.02</td>
<td>0.17</td>
<td>M</td>
<td>84</td>
<td>B</td>
</tr>
</tbody>
</table>
the researcher. The four discourses are presented in the form of a label and a narrative (Dryzek and Berejikian 1993, p. 52). At the beginning of each, some relevant statements for a discourse are presented, together with the idealized score of the four discourses.

5.1. Discourse $A_v$: Supporters of the Responsible Farmer

<table>
<thead>
<tr>
<th>$A_v$</th>
<th>$B_v$</th>
<th>$C_v$</th>
<th>$D_v$</th>
<th>Gender</th>
<th>Year of graduation</th>
<th>Practice area</th>
</tr>
</thead>
<tbody>
<tr>
<td>(0.65)</td>
<td>−0.05</td>
<td>0.20</td>
<td>0.07</td>
<td>M</td>
<td>81</td>
<td>B</td>
</tr>
<tr>
<td>(0.56)</td>
<td>−0.17</td>
<td>(0.45)</td>
<td>0.30</td>
<td>M</td>
<td>81</td>
<td>B</td>
</tr>
</tbody>
</table>

The *defining variates* (loadings that exceed 0.48, $p < 0.001$) are in parentheses.

Workplace key:

B = Brabant/Limburg

U = Utrecht/Gelderland

O = Overijssel

The defining variates (loadings that exceed 0.48, $p < 0.001$) are in parentheses.

Workplace key:

B = Brabant/Limburg

U = Utrecht/Gelderland

O = Overijssel

Table 2. (Continued)

<table>
<thead>
<tr>
<th>$A_v$</th>
<th>$B_v$</th>
<th>$C_v$</th>
<th>$D_v$</th>
</tr>
</thead>
</table>

4. I don’t have a problem with the fact that animals have become a means of production. It is out of the animal that the farmer makes a living.

2. There are not many conflicts with the owner. I act as an intermediary. If the owner has a different opinion than me, we can always work that out.

12. The keeping of farm animals is very much focused on production. There is no attention for the individual animal. The individual animal doesn’t count.

38. It shouldn’t happen that you kill a healthy animal, but sometimes you are taken by surprise by a situation or an owner. Then you can get angry, but sometimes you just have to go along.

37. In general, things are going very well in the Dutch intensive animal husbandry.

33. Pigs are, in general, very well housed, fed and taken care of in Holland.
Veterinarians ranked in discourse A_1 feel strongly connected to the animal’s owner (in this case, the farmer). Veterinarians are service-providers and it is the veterinarian’s duty to help a farmer run his business. Should the farmer’s economic interest be opposed to the animal’s interests, they side with the farmer. There are few conflicts with the farmer. Naturally, veterinarians cannot kill a healthy animal (apart from slaughter for consumption) without emotion, but sometimes they find themselves in a situation where they have no choice. “Dealing with the owners is very important and actually very enjoyable. If you don’t like it, you had better find a different job.”

Animals in food production are economic units, and veterinarians in discourse A_1 are comfortable with this. The animal is a means of production and the farmer simply has to make a living. As a rule, a farmer can never see his cattle “too much” as a means of production: “I don’t object to using an animal on behalf of people, provided that the animal’s health and well-being are not put to harm too much.” The responsibility for the animal’s health and well being is clearly the owner’s: “The animal’s owner is and will be responsible.” For every veterinary intervention, the owner has final responsibility: “We cannot force farmers to perform acts that are economically disadvantageous.” “The animal isn’t mine.” “In the end, it’s the owner who decides.”

Veterinarians from discourse A_1 trust the farmer. Farmers, for example, should be prompted to participate in the decision-making as much as possible. The more farm animal breeders do in terms of veterinary intervention, the more they will be concerned about the well being of their animals. It also reinforces their sense of responsibility.

They believe that intensive animal husbandry could be improved, but is generally good in the Netherlands. In their view, animal well-being is often considerably worse abroad. They consider it a fact that intensive animal husbandry is simply the only way to stay alive economically. Of course, according to veterinarians in this discourse, as a society we should try to smooth some rough edges and we are doing so. Where the current situation is not ideal, things are happening to improve it. The farmers are prepared to cooperate but are having a hard time. Veterinarians in this discourse claim that stating that the pigs’ fate in the Netherlands is bad is nonsense. Pigs are generally well taken care of and well housed in the Netherlands. “Pigs are well off, are well nourished and well taken care of.” “Abroad, the situation is much worse.” Veterinarians in this discourse often claim to be annoyed by the negative image that, in their eyes, remains with intensive animal husbandry (“factory farming” is too negative a term). “It’s much better than people think.” “Pig farmers are conscious of their often negative image.” It is typical in the discourse that the issue of an undeserved bad reputation of intensive animal husbandry was often considered lacking in the fifty-two
statements: “What is missing is a statement about the entrepreneur’s commercial possibilities to be able to comply with all values and rules.” Another aspect considered lacking was public health: “The spearhead should be public health, where the animal’s well-being, among other things, isn’t forgotten.”

5.2. Discourse B; Animals’ Advocates

40. I find satisfying clients more important than the stimulation and maintaining of the health and well being of animals.

4. My loyalty is the most with the animal. In extreme circumstances, I make decisions against the interests of the owner. My point of departure is always the animal.

39. Intensive animal husbandry troubles me, especially the housing of animals. We have grown into the current situation, but if you look at it neutrally, it is a very unhealthy situation.

46. It is a good development that farmers do more and more veterinarian care themselves. Because of this, farmers are more aware of certain issues, they have more knowledge and accept more responsibility.

44. Business considerations play a bigger role in the decision of a farmer to call a vet than compassion and a sense of responsibility.

5. Sometimes you can be forced by the situation to do things that you do not want to do. But if you don’t do them, the animal owner will go to a colleague.

Discourse B, is typified by difficulties in dealing with intensive animal husbandry: “Intensive animal husbandry causes serious problems as far as animal well being is concerned.” They consider it unnecessary and think it should not continue in its current form. The housing of animals is a major cause of concern. They see a country that has grown accustomed to the current system, but it is an unhealthy one. So, it is not so much the fact that animals are kept for human consumption, it is the way in which this happens. “I don’t have any problems with meat production, but I do with the way in which it happens.” “Animal well being can be improved.” “Animal well being is attracting far too little attention, by veterinarians as well as by the
government and farmers’ organizations.” Improving animal well being “is a clear cut task for veterinarians.” Veterinarians from discourse B_v are still prepared to do their work in pig farming, but with the least enthusiasm compared to veterinarians from any other discourse. The fact that pigs are castrated without anesthesia is strongly opposed by veterinarians from discourse B_v. The economic motives behind such a practice do not, in these veterinarians’ minds, justify it.

The correlation between discourses A_v and B_v is lowest among all veterinarians’ discourses. The image of the farmer is much different from the one in discourse A_v. Business economics are a large factor for a farmer when initiating a veterinarian visit. Veterinarians of this discourse view farm animal breeders as owners whose interests in animals are economic rather than compassionate, “Farmers just keep animals to earn a living,” where B_v veterinarians’ starting points have little, if anything, to do with economics and everything to do with the animal’s welfare. They are clearly more loyal to the animal. In extreme cases, decisions are made against the owner’s interest. After all, satisfying clients is far less important than improving and maintaining the animals’ health and well being. The latter is, after all, the primary veterinary responsibility. Even though the owners’ decisions can be acted upon for a large part (this is an important task for the veterinarian), the veterinarian has to make the final decisions and should bear an important part of the responsibility. The veterinarian acts as the animal’s advocate.

When farmers request veterinarians from discourse B_v to perform an unacceptable act, it reinforces the rather negative image veterinarians have of them. “Unreasonable requests are made on a regular basis.” They do not have much confidence in the farmer. Therefore, it is not a good development that farmers take on more veterinary responsibility. They often see injudicious use of medicines by farmers. “Veterinary tasks carried out by farm animal breeders often lead to loss of quality in animal health and are therefore no good.” According to these veterinarians, the more farmers do themselves, the more problems will emerge in animal well-being.

Veterinarians from discourse B_v are more often in conflict with farm animal breeders than those from discourse A_v. It is not necessarily a major conflict. But “to a client, I always point out those situations which are not good for his/her animals’ health or well being and that things can be improved.” And it goes without saying that this leads to differences in opinion. Yet, in this discourse too, even though the veterinarians have a rather negative image of farmers, dealing with the owners is generally considered enjoyable. “I consider dealing with animal owners one of the nicest aspects of the job, even if it can be difficult.”
5.3. Discourse C_v: The Situational, Pragmatic, and Intuitive Veterinarians

Veterinarians from discourse C_v are mostly led by their feelings. This is stated many times, often literally. In explanation of their opinions, one said: “The statements go too much against your feelings or are very much in line with them.” Another voiced “a feeling of very true.” While veterinarians from discourse B_v give a lot of thought to what is best for animals in general, those from discourse C_v judge what is best for animals by providing a judgment, a “feeling” about a situation. They are not so much led by general principles (see for example statement 5; they do not have general rules or principles concerning the killing of healthy animals), as by their own gut-feeling. In doing so, it is “hard to keep ratio and instinct apart.” They often think from and are led by specific situations and examples; they are pragmatic. The individual, sick animal most often takes center stage, but sometimes the farmer does. The animal ought to get the best treatment available. These veterinarians ask themselves: What is best for this specific animal? Veterinarians from discourse C_v are the only ones who think they deal too frequently with general treatments of the whole animal stock at a farm and too infrequently with individual treatments of animals.

While providing service is important (as in discourse A_v), it is interpreted in a different way. Veterinarians from discourse C_v think less along the lines of the farming business and more towards performing veterinary acts with great care. The veterinarian’s time and attention
should go to the individual sick animal. While these veterinarians want
the best treatment for every sick animal, this is not always economically
feasible, meaning they are also very pragmatic. Instinctively however,
they have problems with this. When needed, routine Caesarian sections
are carried out without much hesitation, since it is the best course for the
cow.

Veterinarians from discourse C_v alone believe that owners see the
animal too much as a means of production, they are, therefore, rather
critical towards the farmer. It is not so much the system of intensive
farming that they consider a problem, but the farmers. “I think intensive
farming is a very reasonable branch of industry.” It is typical that the
following statements were made by the same veterinarian: “In general, pigs
are well fed and housed, better than many a human being,” and “Especially
in intensive farming, animals are almost exclusively seen as a means of
production.”

A critical attitude toward colleagues and the thought that there is too
much competition among veterinarians are typical of discourse C_v. Veteri-
narians from discourse B_v act on principle; they refuse to do things they do
not want to do (or think that what cannot be good for a specific animal
cannot serve a higher principle). Veterinarians from discourse A_v are not
often confronted with this situation (they trust and support the farmer). Veterinarians from discourse C_v realize (pragmatically) that if they do not
act, the farmer will invariably turn to another veterinarian who will. Thus
competition is seen negatively and they are sometimes forced to do things
despite. Moreover, the development that farmers take on more veterinary work is, as in discourse B_v, seen negatively. “Medicines can
be obtained somewhere else far too easily.” “I think that farmers do far too
much themselves.”

5.4. Discourse D_v: The Professional Veterinarians

Veterinarians from discourse D_v act on principle more often than those
from discourse C_v. They do not often feel compelled by a situation to do
things, like the veterinarians from discourse B_v. They do not allow a situ-
ation or farmer to force them to do something. “As a professional, I think,
you must be above that. It is unthinkable that a situation determines the
animal’s fate.” Of all discourses, they are most strongly led by the profes-
sion. Legislation and agreements with other veterinarians are seen as
important. It is not so much personal ethics that play the leading role (as is
often the case in discourse B_v); rather, they are guided by shared profes-
sional ethics.
It is typical of veterinarians from discourse D\textsubscript{v} that they often ponder what their job implies, including ethical problems. They are aware of both the possibilities and restrictions of their profession. The veterinarian’s task is never simply providing a service to a human client or an animal patient. Enhancing and maintaining animals’ health and well being is seen as most important. Unlike discourse B\textsubscript{v}, a large share of responsibility remains with the animal’s owner. They do not have a negative image of the owner: it is the veterinarian’s job to help the owner do what is best for the animal. The veterinarian’s task is best described by statement 42: “The owner is responsible for all operations on the animal. It is the veterinarian’s job to communicate the pros and cons.”

As opposed to discourse B\textsubscript{v}, they have no major problems with intensive animal husbandry, although room for improvement exists. They fundamentally object to the castration of pigs without anesthesia: “Logical thinking would be better!” Competition among veterinarians is seen as a major problem of the profession. “A veterinarian is a doctor in the first place. Competition in itself isn’t bad, but too much competition in prices is bad for the animal, the owner and the veterinarian.” Being professionals, veterinarians from discourse D\textsubscript{v}, think about the dynamics of working together: “Working in a group practice means adapting and adjusting; that’s the power of the group.”
6. CONCLUSIONS ABOUT VETERINARIANS’ RELATIONS WITH HUMAN CLIENTS AND ANIMAL PATIENTS

The main question of this article – how do Dutch practicing veterinarians conceptualize animals and their owners and their professional responsibility towards both – is answered by the four discourse descriptions (the discourses show how veterinarians conceptualize animal patients and human clients. The discourses are not the result of some promotional statements). It has become clear that there are different ways for veterinarians to conceptualize animal patients and human clients.

First impressions about correlations between the discourses and variables like age, gender, and practice area can be obtained from Table 2. These impressions can be subjected to more rigorous scrutiny (Thomas et al., 1993, p. 707) by treating the loadings on each of the four factors as separate dependent measures.\(^{15}\)

Gender seems to be of consequence with respect to those graduating after 1990. Women have significantly or nearly significantly higher loadings on discourses A\(^{v}\) \((p=0.02)\) and D\(^{v}\) \((p=0.08)\). Men have higher loadings on discourses B\(^{v}\) \((p=0.06)\) and C\(^{v}\) \((p=0.003)\). Thus more young female veterinarians identify with “The Supporter of the Responsible Farmer” and “The Professional Veterinarian”; young male veterinarians identify more with ‘Animals’ Advocates’ and “The Situational, Pragmatic and Intuitive Veterinarians.” Earlier studies also found correlations among veterinary students between moral reasoning or the human-animal bond and gender (Self et al., 1996; Williams et al., 1999; Paul and Podbersek, 2000; Martin et al., 2003).

The age of a veterinarian seems to make a difference, although not a great one. Veterinarians graduating after 1990 have nearly significantly higher loadings on discourse B\(^{v}\) (Animals’ Advocates) with \(p=0.08\), and those graduating before 1990 have higher loadings on discourse D\(^{v}\) (The

---

\(^{15}\) The differences among these scores were analyzed on a 3 \(\times\) 2 \(\times\) 2 (workplace \(\times\) gender \(\times\) age class) ANOVA design for veterinarians implicit in the P-set. The three-way design was divided into a 3 \(\times\) 2 (workplace \(\times\) gender) two-way design for the younger veterinarians and a 3 \(\times\) 2 (workplace \(\times\) age class) two-way design for male veterinarians because there were no female veterinary graduates before 1990 in the sample (reflecting the general population). The analyses of variance were done by making use of saturated models. In case of an overall significant difference between the three levels for workplace, they were compared pair-wise by separate (i.e., non-simultaneous) contrast tests. As was noted earlier, since the veterinarians were not selected in a purely random manner, conclusions will have to be drawn here with caution.
7. CHOOSING BETWEEN TWO MASTERS

The discourses present further empirical evidence that the factual images veterinarians have of animals and their owners are connected to different moral questions and possible solutions to these questions. They both are part of a worldview. The question of what responsibilities exist towards animals and their owners is connected to morals such as how they feel about intensive animal husbandry. Moral issues – how to treat animals, non-therapeutic surgery, lay veterinary care, farm animal reproduction, the use of growth enhancing drugs, production or performance, reproduction technology, etcetera – are indissolubly tied to veterinarians’ factual images of animals and their owners. The moral questions and the factual images are part of the same discourse. This shows how hard it is to look at moral issues of veterinarians without taking factual views into account. Many ethical disagreements concerning veterinarian practice are not about disagreements on the perceived values of animals, but:

...rest upon differences about what, in fact animals are capable of experiencing. For example, some who believe it is sufficient to prevent farm animals from experiencing pain and discomfort generally believe these animals are capable of such mental states but of little more. In contrast, some who argue that such animals should not be kept in severe confinement believe these animals are capable of experiencing such psychological states such as distress, suffering, boredom and anxiety and that confinement methods of husbandry cause them to experience these states (Fox, 1984) (Tannenbaum, 1993, p. 147).

So, many moral disagreements rest on factual disagreement. As became clear from the discourse descriptions, all discourses are based on different assumptions and priorities. The discourses disagree both about the facts

---

16 Since discourse B_v would be sensitive to the issues discussed in a course like “Veterinary Medicine and Society,” this could be an indication that having these subjects in the curriculum makes a difference, although a more detailed study is needed to draw strong conclusions on this. Growing up in different times and being from different generations might also explain the difference. (This particular analysis did not consider gender, so the fact that more veterinarians will be women is irrelevant here). As mentioned earlier, Blackshaw and Blackshaw (1993) concluded that by their final year, Australian veterinary students have developed some sensitivity in the area of the human-animal bond, which may have been aided by the courses the students received in animal behavior and welfare.

17 Except that among those graduating after 1990, Brabant and Limburg provinces can be identified with discourse C_v (The Situational and Intuitive Veterinarians) by claiming five of the eight defining variates. The analysis of variance confirmed this by giving significant higher scores ($p \leq 0.02$).
regarding animal pain and about what suffering is morally acceptable. Yet, the facts and values are interrelated within the discourses.

When we study the discourses of the veterinarians, a proposition presents itself: whatever role (responsibility) veterinarians see for themselves they expect from their clients too, especially in a moral sense (see also de Graaf, 2005). Veterinarians who think their primary task is to promote the well being of animals believe this should be their clients’ main concern too (even though they might doubt this is actually the case). Those veterinarians who see their jobs as service-providing, are more inclined to expect and accept a business approach from their human clients.

Decisions made cannot be made without information. The information needed differs from discourse to discourse. Another proposition that comes from the data is, therefore, that veterinarians use some sort of information strategy: which information is important and how to interpret it? The discourses described evidence that information strategies are employed when making decisions. Not surprisingly, when facing a dilemma, practitioners often do not consult ethical theory. Veterinarians frame their moral questions such that they are amenable to empirical resolution (Arkow, 1998, p. 193); the information strategy is such that the answers to the questions asked are obtainable, and lead to clear conclusions about which actions to take. So the information strategy is part of a “tractable” morality of the veterinarian (cf. Schön and Rein, 1994; de Graaf, 2005). Often, causality of moral dilemmas is so complex (and infinite), that the outcome of many (principled) choices are unknown, introducing the danger of making action impossible. Yet, veterinarians have to act and constantly make decisions. The information strategy is such that when veterinarians obtain the information they want, they immediately know what consequences that information will have for their actions. Because discourses contain an inherent morality (some of which is explicit but some of which is implicit, even for the discourse participants), it is the discourse that determines what information is relevant. The information strategy, for moral and non-moral questions, is part of a discourse. For example, what if an animal owner, a layperson, asks permission to carry out some veterinary care? E.g., he asks the veterinarian to give him a drug – which by law only a licensed veterinarian may administer – so that a sick animal can get quick treatment in case of need. The veterinarian needs certain specific pieces of information. And the questions they ask themselves depend on their discourse with its inherent worldview, morality, and, coupled with that, an information strategy. Contextual questions emerge (Can I trust this owner? Can he do something else with the drug? Will he put it to wrong use?) These are important. Different answers may cause him or her to make different decisions in seemingly similar circumstances. The veterinarian is not solving a big, moral question, but a small, practical dilemma (de Graaf, 2003).
The research in this article focused on description, not prescription. Yet, the descriptions have consequences. By describing the different (moral) dimensions of their discourses, veterinarians can become more aware of the problems and dilemmas they and their colleagues see. In a sense, the discourse descriptions can be therapeutic. What if there is pressure on the profession from outside sources to change the role of veterinarians in crises like foot and mouth disease, or if veterinarians decide to invite animal rights activists – who are opposed to vets working in intensive animal husbandry – to talk with them? In such a case, the discourse descriptions can make both parties more aware of the standpoints, factual and valuational. This might change how they talk and weigh their options. By becoming aware of different discourses, self-discourse is also looked at differently (as long as the other discourses make sense, which might not be the case when the other discourses are theoretically constructed).

REFERENCES

Brown, S. R., Political Subjectivity (Yale University Press, New Haven, 1980).

18 In 2001, there was an outbreak of foot and mouth disease in Holland. Even though the technology existed to fight the disease, the EU decided not to use the available vaccination because it would have meant the loss of export markets, including the United States and Japan. One of the results was that about 300,000 healthy cows, pigs, and sheep were killed in the hopes of eliminating the virus. Unlike the late 1990's outbreak of swine fever in Holland (when about three million healthy pigs were destroyed), this crisis led to a national debate about the best way to fight disease. It has even led to a renewed public debate about the way animals are held for food production in Holland and a discussion about the quality of animals' lives in modern stables.


*Vrije Universiteit Amsterdam*
*Faculty of Social Sciences*
*Department of Public Administration and Organization Science*
*De Boelelaan 1081*
*1081 Amsterdam HV*
*The Netherlands*
*Phone: +31-20-5986813*
*Fax: +31-20-5986820*
*E-mail: g.de.graaf@fsw.vu.nl*