

FARMERS' RELATIONSHIP WITH DIFFERENT ANIMALS:
THE IMPORTANCE OF GETTING CLOSE TO THE ANIMALS.
CASE STUDIES OF FRENCH, SWEDISH AND DUTCH
CATTLE, PIG AND POULTRY FARMERS.*

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Introduction

Serpell (2004) identified that human-animal relationships are subject to the two primary dimensions: those of affection and utility, which together combine to shape human attitudes towards animals. Serpell noted that animals with a high utility 'often seem to be precluded from becoming the objects of people's positive affections, presumably because such animals are usually harmed as a result of their utility' (2004: p.146). He used this to explain the ambivalence inherent in human-animal relationships.

In the light of this, what is the nature of farmers' relationships with their animals? Livestock animals have a utilitarian function, often expressed in commercial terms, and farmers are involved in running a business. Although some might consider farming and, hence, farmer-animal relationships as essentially utilitarian and exploitative because they involve producing animals that are going to be slaughtered (Lund and Olsson 2006), everybody who personally knows farmers, knows that they care about their animals and feel empathy or even affection. Studies in Ireland (Tovey 2002) and the Netherlands (Van Haaften & Kersten 2002) revealed the deep and genuine sorrow that farmers felt when their cows were killed during the recent Foot and Mouth Disease outbreak. Following Lund and Olsson (2006) the fundamental ethical problem of killing farm animals is mediated and becomes acceptable when there is an emotional attachment between the farmers and their animals and when the animals have a 'good life' before their death (see also Singer 1975).

Caring about animals is also an important element of farmers' identity and culture (Tovey 2003; Porcher 2006) and they see this as a crucial characteristic of being a 'good farmer' (De Greef et al, 2006; Dockes and Kling 2006; Lassen et al 2006; Bock and Van Huik 2006, 2007a, b; Bruckmeier and Prutzer 2006). Society also expects farmers to look after their animals with diligence and care. Fraser (2001: 175) points out that public trust and approval of husbandry systems is based on 'the pastoralist image of humans caring diligently for animals' and of agriculture as way of life. Modern production methods, with their more

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industrial, factory-like farming systems challenge these notions. Rollin (1995) argues that high stocking levels in such systems de-individualize animals in farmers' eyes. Porcher (2006) elucidates how the modernization of farming dehumanizes the work of livestock farmers as it constrains their ability to relate to their animals in the way they would like.

Previous research into the relationship between farmers and their livestock revealed how human-animal interaction affects the welfare and productivity of animals (Hemsworth 2003; Hemsworth et al. 2000; Hemsworth and Coleman 1998; Lensink, Veissier and Florand 2001). These studies demonstrated how good care improved the wellbeing of the animals in terms of health and productivity. But as they showed, it also worked the other way around. Seabrook and Willkinson (2000) showed that many farmers liked being close to their animals and found positive interaction with them one of the specific joys of being a farmer (Dockes and Kling 2006). Hemsworth (2003) demonstrated that good relationships with animals mediated the effects of stressful or painful husbandry procedures. It lightened the burden on animals as well as on farmers and made some parts of the work less unpleasant, less dangerous and less stressful for both. It facilitated working with the animals, made it more enjoyable and as such added to both the quality of farmers' lives as well as to the animal's wellbeing and productivity. One might argue, then, that empathy with animals is a functional or even necessary quality for achieving the instrumental aims of farming. A 'good' and successful farmer needs to care about his or her animals. Yet the question remains whether farmers care the same for all their animals and the extent to which different sectors and husbandry systems influence this. This is especially relevant in the light of social concerns about the effect that modern day intensive husbandry systems may have on farmers' affection and empathy for their animals (Kanis et al. 2003; Te Velde et al. 2002).

Wilkie (2005) recently developed a framework for evaluating human-livestock relations, in which she describes the relationship in terms of varying degrees of attachment and detachment. Drawing on Merton (1976 in Wilkie 2005) she argues that the human-animal relationship is characterized by ambivalence as farmers have to move between 'the instrumental impersonality of detachment and the functional expression of compassionate concern' (Merton cited in Wilkie, 2005: 217). Based on research among British livestock farmers (both professional and recreational) she distinguishes between four types of human-animal relationships:

- Concerned detachment
- Concerned attachment
- Attached attachment
- Detached detachment

In 'concerned detachment', farmers handle their animals with care, but relate to them in a detached manner: seeing them not as individuals, but rather as a function of commercial production. The relationship is impersonal and indifferent. According to Wilkie this is characteristic of farmers who rear livestock for slaughter or who work with large numbers of animals. In 'concerned attachment' the relationship between livestock and farmer is more personal. The farmer appreciates the animals for more than their production utility and sees them as individuals. This tends to happen in situations where there is more personal contact with the animal and is more likely when animals are used for breeding, as these animals stay on the farm for a longer period of time, and when the farmers are more physically involved with them. In 'attached attachment' farm animals are regarded as outdoor pets and receive preferential treatment. Wilkie considers that it is uncommon among commercial farmers who depend for their incomes on the utility that the animals provide, and only found this attitude

among recreational ‘hobby’ farmers. Nevertheless, we’ll see below that in France and Sweden, some commercial cattle farmers and also a few pig farmers in Sweden expressed attitudes and feelings which are very close to this definition. The relation of ‘detached detachment’ is most common among farmers who only deal with their animals from a distance and do not handle them directly; leaving them room to regard livestock purely as a commodity.

Wilkie’s analysis suggests that affection and attachment are dependent on the function of the animal and the phase at which an animal is in its production cycle. These factors influence the frequency, intensity and intimacy of farmers’ contact with their animals. In a similar vein, Seabrook (1994, 1986) found that the animal production system affects farmers’ attitudes towards their animals. His research confirmed that the frequency and intensity of contact with individual animals are of great importance in this regard.

This article seeks to provide a deeper understanding of the factors that influence farmers’ relations with animals and focuses on the relevance of sector (e.g. beef or dairy cattle), animal species, housing systems and any national differences. It seeks to draw out how the relationship between farmers and their animals is influenced by the context of daily caring practice. It uses Wilkie’s framework of attachment as it is derived from practice and recognizes the importance of the paradoxical aspects of farmer-animal relations that are simultaneously emotional and professional. While Wilkie compared how professional and recreational farmers related to their cattle (and in some cases sheep), we concentrate here on professional farmers but compare differences between species, sectors and husbandry systems. In this way we hope to generate more insight into those aspects of production systems that can be strengthened in order to ensure positive human-animal relations, for the sake of both animal welfare as well as farmers’ quality of life.

Research methods

The article combines the results of several case studies among pig, cattle and poultry producers in France, the Netherlands and Sweden.¹ We talked with farmers about their beliefs and attitudes about animals, animal welfare and good farming and their relationship with their animals. In total we interviewed 480 farmers, 87 of whom were organic farmers and 31 of whom were involved in specific animal welfare production schemes (a combined total of 25%). The farmers were engaged in the pig (meat production and breeding), cattle (dairy, beef and veal production) and poultry sectors (egg and meat production). Farmers engaged in organic agriculture and specific animal welfare production schemes generally worked with more ‘natural’ and animal-friendly housing systems, such as free-range outdoor systems for fattening pigs and broilers. About sixty farmers were interviewed in each sector in each country. As the interviews with Dutch pig farmers did not include the issue of farmer-animal relationship, we excluded them from this analysis (see table 1). No Swedish veal producers were interviewed, as there is no veal production sector in Sweden. The sample is not representative of the populations of livestock farmers in these three countries. Rather, its purpose was to explore the *diversity* of farmers’ attitudes towards animals and animal welfare; and it was therefore necessary to include a more than representative share of farmers engaged in organic agriculture and specific animal welfare schemes in each of the various production sectors.

¹This study was carried out as part of the EU research project WELFARE QUALITY®. For more information about the project see www.welfarequality.nl. For more information about the various case-studies see Bruckmeier and Prutzer 2005, 2006, 2007; Souquet, Kling-Eveillard and Dockès 2005; Bertin, Dockès and Klink-Eveillard 2006; Kling-Eveillard, Mirabito and Magdelaine 2007; Van Huik and Bock 2006, 2007; and for cross country reports Bock & van Huik 2006, 2007, 2008..

Table 1: Sample characteristics

| | France | Sweden | Netherlands | Total |
|---------------------------------|--------|--------|-------------|-------|
| <u>Pig</u> | | | | |
| Breeding & fattening | 43 | 23 | | |
| Breeding | 1 | 20 | | |
| Fattening | 18 | 17 | | |
| Conventional | 54 | 50 | | 104 |
| Organic | 4 | 10 | | 14 |
| Specific animal welfare schemes | 4 | | | 4 |
| <u>Cattle</u> | | | | |
| Dairy | 20 | 14 | 24 | |
| Beef | 27 | 33 | 19 | |
| Dairy & beef | | 13 | | |
| Veal | 13 | | 13 | |
| Conventional | 48 | 47 | 40 | 135 |
| Organic | 12 | 13 | 10 | 35 |
| Specific animal welfare schemes | | | 10 | 10 |
| <u>Poultry</u> | | | | |
| Meat | 30 | 30 | 30 | |
| Egg | 30 | 30 | 30 | |
| Conventional | 31 | 45 | 48 | 124 |
| Organic | 11 | 15 | 12 | 38 |
| Specific animal welfare schemes | 17 | | | 17 |
| | 181 | 180 | 119 | 480 |

A basic, common questionnaire, with semi-structured questions, was used for the interviews. Each country team was free to rephrase the questions to make them more appropriate to their national context. Most interviews took place on the farm, although some interviews were carried out by telephone, especially when Avian Influenza made some poultry farms inaccessible. The interviews lasted for an average of one and a half hours and were recorded on paper or on tape. A content analysis of the texts was carried out with the help of QSR NUD*IST Software N6 (in Sweden) and ATLAS.ti (in the Netherlands). The analysis focused on the diversity of farmers' attitudes towards animals and animal welfare.

The following section describes how farmers perceived their relations with animals in different production sectors, using the framework and concepts established by Wilkie (2005). From there we move on to drawing out the factors that influence the relations between farmers and their animals. In the conclusion section we look back on Wilkie's framework and try to elaborate on the mechanisms in animal production that influence farmers' attachment to their animals.

Farmers' relationships with their animals

Cattle: from concerned (and sometimes even attached) attachment to detached detachment

Most cattle farmers have a sense of attachment to their cows, with the bond ranging from loose to very close. Some French farmers described their relationship as one of deep attachment, which almost resembled a family relationship. They say that they could not live without an affectionate relationship with their animals. More than half of the Swedish farmers referred to the relationship as akin to one with family-members, friends or colleagues.

“As a cattleman you feel strongly allied to some animals. Some are easier to handle than others. I have one cow who has not given any milk for six months, but she is a good animal. Had not I liked her so much, she would have been slaughtered long ago. I had another cow that could not be milked, but she fitted so well with the rest of the herd that I could never think of getting rid of her.” (Swedish dairy farmer)

Even farmers who described their relation as rather detached and who pointed out that they kept the animal for gaining an income, also underlined how much they liked their animals. They liked caring for them, stroking and patting them and being physically close to them.

Concerned attachment and sometimes attached attachment

Cattle farmers distinguished between their pets and their cattle, feeling closer and more attached to their pets, although at times a cow could become almost a pet in terms of attachment. Farmers also differentiated among their cows and generally felt closer to suckling and milking cows. This was partly a result of the number of animals and partly because of the length of the time that they stayed on the farm. Both increased the knowledge of the animal as individual.

“Every cow is an individual in my view... When they come inside the stall, the relationship becomes more personal. You do not talk or spend time with a heifer every day. The milk cows you see twice a day. You can see straight away if they are not feeling well. With heifers, just have a look at them, feed them and then walk away.” (Swedish dairy farmer)

Farmers also found the close physical contact involved in milking a cow as very important in developing an emotional bond with dairy cows. French dairy farmers described their relationship with their dairy cows as a lasting relation of mutual trust which made milking the cows more pleasant, safer and also more profitable, as it increased milk production.

“You have to create a balanced relationship with the anima, so as to make a profit, but in exchange we have obligations. It’s not just a relationship of power.” (French dairy farmer)

Some French and Swedish cattle farmers could not imagine their life without animals. They felt really emotionally attached to some of their cows and felt bad when they had to sell them to the slaughterhouse. Their relationship can be qualified as attached attachment, even if they made their living by keeping cows and did not consider them the same as pets. Some Dutch and French dairy farmers underlined the importance of breeding their own cows, sometimes working with bloodlines that had been established by their ancestors, which added special meaning to the relationship.

“The cows mean a lot to me. Since I was fifteen, I’ve been responsible for breeding and I enjoy that a lot. It’s a challenge keeping the production in order with relatively cheap sires, and following your own mind a little bit. Without these cows, I wouldn’t even have become a farmer, although I’m less emotional about it now. Without these cows, I might have emigrated, but I can’t take them with me, can I?” (Dutch dairy farmer).

Concerned or detached detachment

Bull and veal farmers described their relationship with their animals in a different way, with a considerable number referring to the animals as tools for production. Nearly a third of the Dutch veal farmers claimed that they did not have a relationship with their animals, but kept their calves strictly for business motives. This did not preclude feeling responsible for and taking good care of them as living and sentient beings but they did not feel attached to the individual animals.

The importance of the housing system for calves came again to the fore when several French farmers described how the status of calves changed with the implementation of group housing systems. By seeing the animals more than when they were in small individual pens, and by watching them play and interact with other animals, the farmers rediscovered the animals as 'real' animals instead of living 'production material'. This also helped to re-individualize their stock.

“Veal calves used to just bring in the money, we didn't see the animals the same way...we work differently with them now because we are in proximity to them – we have to go and get them, we know them better, we live with them...we're dealing with a herd...” (French veal farmer)

“We work differently with the animals, we are more in contact with them... we learn the tag number, before it was just the pen...there are some veal calves I often think about.” (French veal farmer)

In general however there were usually too many calves for farmers to recognize them as individual animals. Dutch veal farmers explained that the large number of animals and their short stay on the farm inhibited them from developing a real bond with the animals. Most farmers said that they did not differentiate between individual calves and only treated them individually when an animal fell ill.

“Every calf is being thought of, but there is no individual attention for each calf, unless they are ill.” (Dutch veal farmer)

Beef farmers also described how they consciously kept the animals at an emotional distance as these animals were destined for slaughter. In addition, the size and strength of bulls was an important factor influencing their relationship. Most Dutch beef farmers said they avoided getting too close to them as a safety precaution.

“It is a kind of truce. If they don't hurt us, we don't hurt them. But we are very fond of them. We take the best possible care of them. After we've just refreshed their bedding, and they are lying in the straw, I think that there is nothing more beautiful than seeing a couple of bulls lying in a thick layer of straw. As long as they're here they receive perfect care, but in the end, when they are standing in line at the slaughterhouse, it is the end of the story. And you mustn't fret about it.” (Dutch beef farmer)

In France and in Sweden, a few dairy farmers with large farms, expressed to be most interested in the technical aspects of their production. Their relationship with animals can be described in terms of 'detached detachment'. They followed and observed the technical parameters of milk production rather than the situation and the welfare of their animals.

In terms of Wilkie's framework, cattle producers' relationships with their animals generally range from concerned attachment to concerned detachment, with a few farmers who felt either attached attachment or detached detachment. Farmers felt concerned attachment for their dairy cows and sometimes for a calf that became special because it had been in need of individual care and attention. Most commonly, farmers described their relationship to bulls and calves as concerned detachment, and sometimes detached detachment. In part this is a result of self-protection and conscious avoidance of attachment to animals that will soon be slaughtered (see also Te Velde et al. 2002) or for reasons of physical safety. In addition to this the frequency and intimacy of human-animal contact were important factors, and these are partly influenced by the type of animals and the need for close bodily contact during the daily practice of caring for and handling them (see also Porcher 2006). The housing system also influenced this, as different systems offered differing opportunities for getting close to the animals and seeing them as individuals and animals. The nationality of the farmers did not greatly influence their attitudes or relationships with their cattle, even if Swedish or French farmers expressed sometimes an "attached attachment" attitude towards some cows.

Pig production: concerned attachment to concerned detachment

This chapter only concerns French and Swedish farmers. Many farmers described their relationships with their pets and their cows as being closer and of a higher status than their relationships with pigs.

"They're not like dogs; we don't exactly take them for walks one by one!" "I am not at all familiar with the pigs, whereas I know each cow." (French farmer)

The main factor preventing pig farmers from developing close emotional bonds with their animals was the large number of animals that most farmers have. Like cattle farmers, pig farmers distinguished between different types of animal – in this case pigs reared for fattening and those kept for reproduction. Farmers generally felt more attached to their breeding sows than to their fattening pigs. This was partly due to sows staying on the farm for a longer period, but also to the stronger interaction they have with individual animals and the physical contact involved in caring for sows and piglets. The difference between animals that were kept for procreation and slaughter was also important (see also Wilkie 2005).

Again farmers described how they deliberately avoided getting attached to animals that would only be staying on the farm for a short period of time and would be slaughtered.

"A fattening pig is not endearing, whereas you can have a relationship with the breeding part of the herd." (French farmer)

"Yes, it is often difficult. The fattening pigs are not the same, but when it comes to sows and boars there are more feelings. When the boars are sold even my husband is soft. When we are selling cattle I won't get involved in loading them. When they are sold you have to forget [about sending them to slaughter]. It's OK to send the fattening pigs to the slaughterhouse. But I do recognize some of the sows, and that is strenuous." (Swedish pig farmer)

Although many farmers emphasized the importance of having a relationship with the animals and of enjoying it, the relationship generally did not extend to affection. Most pig farmers acknowledged their pigs as sentient beings and said that they tried to ensure good living

conditions for them and to avoid suffering, although they did not develop a particular relationship with them.

“I do not have an emotional relationship with the pigs but a professional technical view. I have a good understanding of the animals, but do not pat them. I see them as a tool for production and feel satisfied if I can do something good for them and I can see that they feel good. If you want to make some money from the animals you have to like them.” (Swedish pig farmer)

Very few pig farmers in France talked about their relationship with their fattening pigs in terms of affection, such as ‘feeling akin to the pigs’, seeing the pigs as ‘friends’ or ‘my children’ and ‘the nice feeling from being together with the animals’. Meanwhile, about half the Swedish farmers interviewed felt akin to their fattening animals, especially when they also had breeding activity on farm.

Many farmers with integrated systems (breeding and fattening), expressed an affectionate attitude towards their sows, but more frequently in Sweden where this attitude concerned more than half the farmers.

“I treat my pigs about the same way as my children....the sows are like dogs, they follow after me.” (Swedish farmer)

Overall, however, farmers did not perceive pigs to be as likeable as cows.

“I do not have an emotional relationship to the pigs but look at them from a professional and technical point of view. I am good in understanding the animals, but do not pat the animals. I see them as a tool for production and feel satisfied if I can do something good for them and when I can see that they feel good. If you want to make money with them you have to like animals.” (Swedish farmer)

Wilkie’s concept of ‘concerned detachment’ seems to provide the best description of how pig farmers relate to their fattening animals. Although the relationship with breeding pigs was closer than that with fattening pigs, it did not become as close or as emotional as the dairy farmers’ relationship with cows. Nevertheless for a few French farmers and nearly half of the Swedish farmers the relationship with their sows can be qualified as concerned attachment. In this case, the farmers compared their sows and boars to family or friends as did cattle farmers quite regularly. This could be considered as a noticeable national difference between Swedish and French farmers.

Poultry production: concerned detachment to detached detachment

Poultry farmers generally had more difficulty in responding to our questions about their relationship with their animals. They struggled in describing their feelings towards them and sometimes defined them in negative terms, in terms of what they did not like about the animals. Others compared their relationship with their poultry to those with their other animals, either pets, or other farm animals, and said that they felt much closer to the last two groups.

“You have a lesser bond with a hen than with a cow. With the hens you don’t actually have a relationship. They are on your farm for a year and then they go. Cows are different. They are more likeable. You don’t know individual hens. You keep them for an economical goal. But that doesn’t mean that you don’t

take real good care of them. We try to earn a living with them.”
(Dutch laying hen farmer)

Many poultry farmers talked about their relationships with poultry in terms of production, referring to them as ‘tools of production’. This was more common among broiler farmers than among those rearing laying hens. Generally, poultry farmers did not feel emotionally attached or close to the birds and had no relationship with individual chickens but referred to the whole flock.

“It’s a relationship with the flock, rather than between animal and man.”

“We don’t recognize individual hens, they are all the same.”

“They’re animals but not likeable ones.” (French poultry farmers)

This lack of attachment could be explained in terms of the large number of birds staying on the farm for a relatively short time, especially in the case of broilers. Farmers thought that it was theoretically possible to get attached to an individual chicken, but not when there were so many of them as individuals disappeared into the flock.

“Individual contact with hens is difficult, because there are so many. That’s why I always look at the whole flock.” (Dutch laying hen farmer)

“Yes, I think I feel empathy [towards the broilers], although I do not pay attention to individual chickens. I follow the development of the flock and have a feeling for the conditions in the barn. I sense the state of the birds, the temperature, the smell etc. I notice instinctively when there is a problem. ...There are many things which should work technically and one needs an interest in technique to be able to take care of chickens.”
(Swedish broiler farmer)

Many poultry farmers underlined that they wanted their animals to feel well and considered themselves duty-bound to provide good living conditions. They considered it important to take good care of them but did not feel connected to them by any emotional bond.

“You need to take the time to observe them (...) be very vigilant and alert to any signs of discomfort.” (French broiler farmer)

“I would do anything for my animals. Respect, devotion, listening. Not just when they do badly, but also the satisfaction when they do well. Only there are just too many there to have a personal connection with.” (Dutch laying hen farmer)

Farmers were pleased when their birds were doing well and felt bad when they were not doing well or were ill. Broiler farmers did not like their birds being ill, finding dead animals in the barn or having to kill birds; even though they did not feel emotional about sending them to slaughter.

“We do have a certain bond with our broilers. For instance, 10 years ago we had Newcastle Disease (NCD) and we saw them becoming really sick. That was really bad and we had real trouble even walking through the barn. Not because of the money, but because of what is happening right before our eyes. But when everything goes well with the flock and they have to go

to the slaughterhouse: that is not emotional. That is the way things should go.” (Dutch broiler farmer)

Some of the laying hen farmers claimed that they had a good relationship with their hens, really liked working with them and considered them as ‘fun animals’. Most of these were organic farmers or kept their animals in a free-range outdoor housing system. This attitude was also present in a majority of indoor free-range laying hen systems in Sweden.

“I am a poultry farmer in my heart and in my soul. I do not have the same feelings for other animals. It never tires me to do something for my hens. I don’t mind getting up in the middle of the night for them. We never go on holiday.” (Dutch laying hen farmer)

Some broiler farmers spoke more of the job than the animals when they spoke of their relationship with their animals. These farmers enjoyed working with broilers when they were young, but when the broilers reached a certain age and size, the work became unpleasant and they did not even like to enter the barn.

“I don’t have them for pleasure. I’m trying to earn a living. Of course I enjoy the work, but I don’t have a relationship with the broilers. The tiny chicks, that is nice and fun, but after that it’s work.” (Dutch broiler farmer)

‘Detached detachment’ and ‘concerned detachment’ seem to be the best way of describing poultry farmers’ relationships with their stock. This does not preclude taking good care of the animals and watching them closely, but one of the main features of this relationship is the de-individualization of animals. Chickens are perceived as part of a group (a flock) and of a production system. The number of animals is undoubtedly an important factor, as is the lack of contact with individual animals. This later issue is related to the housing system. Farmers with housing systems that minimized contact with the animals and had a high stock density tended to lose sight of the animals as individuals. Farmers who kept chickens in outdoor and free range systems expressed more attachment to their chickens and recognised them more as ‘real’ animals. Some broiler farmers expressed that they had difficulty in even confronting the living conditions of nearly full grown broilers. This suggests that avoidance of attachment might also be related to feelings of guilt. Again, except for the fact that the Swedish farmers express more often some kind of attachment to their laying hens, there were no significant national differences in the attitudes of the poultry farmers.

Factors influencing farmer-animal relationships

The results draw on Wilkie’s concepts of attachment and detachment that were initially adopted and tested on cattle and sheep farmers in the UK. In this paper we have extended Wilkie’s analytical framework to professional cattle, pig and poultry producers in three EU countries. We identify the presence of Wilkie’s four categories of levels of attachment. The attached attachment level is rare in our sample and seems to be reserved by farmers for only some cows, few pigs and mainly for their pets. It is indeed rarely found among professional livestock farmers, who earn their living by rearing livestock and selling them or their products.² This includes sending their animals to slaughter sooner or later and this leads

² Dockes and Kling (2006) already identified a group of professional farmers who felt an emotional bonds similar to attached attachment for their animals.

many farmers to consciously avoid to becoming as attached to their stock as they are to their pets.

Farmers have clearly differing degrees of attachment to their farm animals. This varies between, as well as within, species. For some animals farmers felt concerned attachment, while for others they had a feeling of concerned, or even detached, detachment. Table 2 identifies which animals fall into these categories.

*Table 2: Predominant type and level of farmers' attachment to farm animals**

| | Attached attachment | Concerned attachment | Concerned detachment | Detached detachment |
|------------------|---------------------|----------------------|----------------------|---------------------|
| Dairy cows | X | XXX | X | X |
| Suckling cows | X | XXX | X | |
| Calves | | X | XXX | X |
| Bulls | | | XXX | X |
| Breeding sows | | XX | XXX | |
| Fattening pigs | | | XX | XX |
| Poultry outdoors | | | XXX | X |
| Poultry indoor | | | XX | XXX |

* the number of Xs expresses the frequency of the attitude

Animal species: ability to identify and communicate:

Table 2 shows that animal species does make a difference, even if one can encounter different levels of attachment with each species. Farmers generally felt closer to their cows than their pigs or chicken. The cows were perceived as more likeable animals and were the species which farmers compared most often to friends or even family members, and of sharing mutual feelings and relationships.

Sector and housing system: frequency and intimacy of human- animal contact:

Farmers generally felt more attached to breeding animals than to fattening ones. While farmers were generally more attached to their cows than their pigs, they were fonder of their sows than their fattening pigs. They explained this difference in their feelings for animals of the same species in terms of the animals' functions and the frequency and intimacy of the contact they had with the animals in their daily caring routines. Fattening pigs, veal calves or poultry are fed and controlled in groups; generally this offers little opportunity for bonding with individual animals (depending on the need for more individual contact during other caring activities). In addition the process of feeding is often mechanized. By contrast, monitoring a reproductive cycle or assisting a sow or cow during delivery are specific tasks that involve close, direct, and more intense contact, with individual animals. They also involve physical or bodily contact which, following Porcher (2006), induces feelings of attachment. The task of milking a dairy cow at least twice a day also requires close physical contact. Developing a relationship of trust with the dairy cows by speaking to them, patting and caressing them further strengthens these bonds. This also helps the farmer in that it creates a safe working environment and stimulates milk production.

Housing system and stock density: the individuality of animals:

Although there were some farmers with an affectionate relationship with their animals in every kind of housing system, the housing system (and its level of mechanization) clearly influenced farmers' relationships with their animals. Some housing systems hide the individual animal, either as a result of the small and closed pens (as with veal calves) or cages (as with laying hens), or because the individual animals get lost in a mass of animals grouped together (as with broiler sheds). As a result the animals become de-individualized and sometimes even partly de-animalized. Chickens for example were often seen as part of a

flock and easily perceived as part of the production system. Not only did they lose their individual status, but their status as ‘real’ animals also became obscured and changed into ‘living production tools’. In some housing systems the animals remain more visible as (individual) animals than in others because the farmers can see them moving, playing and interacting with other animals. Organic farmers and those engaged in specific animal welfare schemes often make use of different housing systems than conventional farmers and this helps to explain why they are more attached to their animals.

Another important factor was the number of animals that a farmer deals with. The larger the number, the harder it is to differentiate between individuals. In general on-farm populations of fattening animals tend to be larger than those of breeding animals, especially in the production of fattening pigs and broilers. But stock density depends also on the husbandry or housing system (and its level of mechanization). The stock density of laying hens tends to be higher in caged systems than in free range systems. This may explain why organic or alternative farmers have a closer relationship with their animals than conventional farmers (see also Segerdahl 2007). Generally poultry systems, whether for meat or egg production, have population sizes that prevent farmers from perceiving the chickens as individuals. Most poultry farmers reported relating to their flocks as a whole, not to recognizing individual animals.

On farm-stay, life span and production for slaughtering: time for bonding and deliberate avoidance:

The different perception of, and relations to fattening and breeding animals can also be explained by the difference in their life spans and length of presence at the farm. Dairy cows have longer productive lives than sows; sows longer productive lives than fattening pigs, which in turn have longer productive lives than poultry. When farmers are working with fattening animals that they know will have a limited life span, they often deliberately keep the animal emotionally at a distance and avoid attachment in order to protect themselves from any negative feelings. Breeding animals on the other hand, remain on the farm for longer, and this provides greater opportunity for the farmer to develop a relationship with them. That life-span matters is also confirmed by the fact that those integrated (Swedish) farmers who fattened pigs born on their farm, tended to express more empathy also towards their fattening pigs.

Links to farm and family history: entering the personal domain:

The role that animals play in the personal history of the farmer provides another explanation for the difference in status of fattening and breeding animals. For cattle farmers in particular, breeding animals represent a form of genetic capital, used to create the next generation of animals, with better traits and qualities than the current generation. These farmers mostly breed with animals that were born on their own farm, from bloodlines created by the farmer’s parents or earlier generations. This provides a connection between the history of the animals, the farm and the family. Farmers do not have such a sense of continuity with animals reared for slaughter and if the fattening animals were bought instead of bred on-farm there is no historical link at all.

Taken together these factors (animal species, production sector, housing system, stock density, on farm, stay, life span, function and history) help to explain the differences in farmers’ relationships with their animals. Farmers tend to feel more attached to animals which they see as likeable and responsive to humans, those which require frequent and intimate contact, and those which stay on the farm for a longer period. The number of animals and the ability to see them as individuals also matters. These variables are related not

only to the species, but also to the function of the animal and the production system of which it is a part. Cows are perceived as the most likeable of the three species and farmers deliberately avoid getting attached to animals with a short life span. The housing system also has an influence as it affects the number of animals kept and their visibility as individuals and manifestation as animals, and has implications for the frequency and intimacy of daily human-animal contact.

Conclusions

Farmers are expected to care about their animals and to look after their welfare. This is part of the traditional image of farmers (Fraser 2001). But also modern society at large and farmers themselves both consider caring well for animals as an essential element of being a good farmer. Yet there are also increasing social concerns about animal welfare and the possible lack of empathy from modern day farmers towards their animals, brought about by intensification and mechanization of animal husbandry. This article reports on how farmers themselves describe and experience their relationship with their farm animals.

The analysis makes use of the framework provided by Willkie (2005) who distinguishes four types of relationship of varying levels of attachment and detachment. This suggests that the frequency, intensity and intimacy of farmers' contact with the animals defines the level of attachment or detachment that farmers feel for their livestock. Willkie's study focused on cattle farmers, comparing the experiences of professional and recreational farmers in the UK. This paper focused solely on professional farmers but extended the analysis to three animal species, using different production sectors, housing systems in three different countries.

Professional farmers' relationships with farm animals ranged from concerned attachment (and even attached attachment for a few farmers) to detached detachment. Hardly any of the farmers qualified their relationship with all their farm animals as attached attachment. Generally, they only felt such close, emotional bonds with their pets and sometimes a few cows or pigs. Our analysis confirmed that animal species matters as does the purpose for which they are kept, the number of animals, the length of their stay on the farm and the frequency, intensity and intimacy of the contact between the farmer and the individual animal. In general farmers felt more attached to cows than to pigs or chicken as they find cows more likeable and are able to enter into mutual relationships with them. Farmers also felt closer to breeding than to fattening animals, because the former generally needed more individual care and attention and stayed longer on the farm.

Farmers often deliberately avoid becoming attached to animals destined for slaughter that will only stay on the farm for relatively short periods, such as fattening pigs and broilers. In Willkie's terms the relationships that farmers have with fattening pigs, broilers and laying hens can best be described as ranging from concerned detachment to detached detachment. The organization of the production and housing systems plays an important role as it influences the chances of the farmers recognizing the animals as real animals instead of living means of production, and offers different opportunities for physical contact with individual animals. Within some systems it is easy for animals to become de-individualized or even de-animalized, as they get lost in the group and become part of the production technology. This happens most frequently with fattening pigs, broilers and laying hens and to a lesser extent with bulls and calves. In these intensive husbandry systems farmers deal with large groups of animals, often use sophisticated technological devices to provide daily care and, hence, hardly have any contact with individual animals. Sometimes animals regain their individual status by chance when for instance sickness requires that farmers offer individual care. 'Detached detachment' does not preclude taking good care of the animals and avoidance

of suffering. They deserve this respect as ‘living means of production’. What seems to be lacking is the emotional aspect of empathy, the recognition of the animal’s individuality and the acknowledgement of its animal nature.

At the opposite end of the ‘attachment-ladder’ we find mostly dairy farmers and some breeding pig farmers, who described their relationship with cows as one of concerned attachment (and even attached attachment for a few of them). They liked their animals even though they were kept for production. Farmers never lost sight of the individual status of the dairy cows or their status as ‘real’ animal. Taking care of them involved close physical contact which also stimulated emotional bonding. The fact that dairy farmers often bred their own animals making use of old bloodlines was also important as this connected the animals and the farm through generations. The cows became, as it were, part of the family history.

The middle position of concerned detachment was most prominent among farmers with breeding sows, calves in group housing, broilers or laying hens when kept outdoors and sometimes fattening pigs when kept in integrated systems. These animals had in common that they are kept in a way in which the individuality of the animals remained visible. This was partly because of the individual care involved but also, with calves and broilers, because these housing systems allow the animals to exhibit individual behaviour by moving around and interacting with other animals. This prevented these animals from becoming de-individualized and de-animalized which tended to happen to the same species kept in intensive housing systems.

While farmers kept animals for economic reasons they still felt responsible for taking good care of their animals. This is related to their perceptions of good farming, in which taking good care of animals is seen as a key element (Bock and Van Huik 2006, 2007a/b; Porcher 2006; Tovey 2003). It is also a prerequisite for achieving good technical and financial results. Good management of livestock also provides the farmer with the means to live in the countryside and enjoy ‘the way of living’ of a farmer. These latter aspects of farmers’ relationships with their farm animals, together with the sense of joy and fulfilment that farmers received from working with them, explain why they care about their farm animals even if they are instrumental for achieving an income. This study found hardly any difference in the attitudes of farmers in different countries, that could not be accounted for by the prevalence of different production sectors and housing systems within the countries. These are partly related to different national animal welfare regulations.

The ongoing process of agricultural scale-enlargement and the concentration of animal production in a smaller number of large farms will continue to influence farmer-animal relationships, since these developments increase the number of animals that a farmer has to look after. At the same time more technological devices are being used for taking care of the animals. From our research we would expect these trends to contribute to a more detached relationship between farmers and their animals: with the animals becoming de-individualized as group care replaces individual care. Animals can even be de-animalized when they become perceived as solely living tools of production. There may, hence, be good reason to worry about the weakening of farmers’ attachment to certain animals in sectors, such as meat production, where scale-enlargement and intensification is ongoing.

This could be counterbalanced by a tightening of animal welfare legislation, to promote the adaptation of production systems that strengthen farmers’ contact with individual animals, counteract the disappearance of individuality within the group and prevent farmers from seeing animals as part of the “production machinery”. This could assist farmers in maintaining their perception of their animals as real animals. Such systems need not necessarily be organic, although several authors are clear about the benefits of organic

systems in terms of animal welfare and human-animal bonding (Lund and Olsson 2006; Segerdahl 2007; Fjelsted Alroe et al. 2001). Taking into account the findings of this and other studies about the mechanisms that assure the recognition of animals as animals and as individuals and that facilitate attachment from farmers to their animals, it seems crucially important that farmers get physically close enough to the animals through seeing, touching, speaking and listening to them. Such proximity seems to be at the foundation of good stockmanship, or what farmers themselves define as archetypical 'good farming practice'.

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References

- Bertin, M-A. , A-C Dockès and F. Kling-Eveillard. 2006. Subdeliverable 1.12. Welfare Quality Project – French report on case-study 2 - Cattle farmers, Welfare Quality, Institut de l'Élevage, Paris.
- Bock, B.B. and F. Van Leeuwen. 2005. "Review of Socio-political and market developments of animal welfare schemes" Pp. 115-171 in *Farm Animal Welfare Concerns, Consumers, Retailers and Producers*, edited by J. Roex and M. Miele. Cardiff University: Welfare Quality Report No. 1, 115-167.
- Bock B.B. and M. van Huik (2008, forthcoming) Attitudes, beliefs and behaviour of poultry farmers in: J. Roex and M. Miele (eds), *Farm Animal Welfare Concerns; consumers, retailers and producers*, Cardiff: Cardiff University Press, Welfare Quality Report No. 7
- Bock B.B. and M. van Huik (2007, forthcoming) Attitudes, beliefs and behaviour of cattle farmers in: J. Roex and M. Miele (eds), *Farm Animal Welfare Concerns; consumers, retailers and producers*, Cardiff: Cardiff University Press, Welfare Quality Report No. 6
- Bock, B.B. and M.M. van Huik (2007, forthcoming) Attitudes, beliefs and behaviour of cattle farmers in: J. Roex and M. Miele (eds), *Farm Animal Welfare Concerns; consumers, retailers and producers*, Cardiff: Cardiff University Press, Welfare Quality Report No. 6
- Bock, B.B. and M.M. van Huik (2007), Animal welfare, attitudes and behaviour of pig farmers across Europe, *British Food Journal*, 109(11), pp.931-944
- Bock, B.B. and M.M van Huik (2006) Attitudes, beliefs and behaviour of pig farmers in: U. Kjaernes, M. Miele and J. Roex (eds), *Attitudes of consumers, retailers and producers to farm animal welfare*, Cardiff: Cardiff University Press, Welfare Quality Report No. 2, pp. 73-126
- Bracke M.B.M. and H. Hopster. 2006. "Assessing the importance of natural behaviour for animal welfare". *Journal of Agricultural and environmental Ethics*, 19: 77-89
- Bruckmeier, Karl and Prutzer, Madeleine. 2005. Subdeliverable 1.11. Welfare Quality Project – Swedish report on case-study 1 – Pig producers, Welfare Quality, University of Göteborg, Göteborg.
- Bruckmeier, Karl and Prutzer, Madeleine. 2006. Subdeliverable 1.12. Welfare Quality Project – Swedish report on case-study 2 – Cattle producers, Welfare Quality, University of Göteborg, Göteborg.
- Bruckmeier, K. and M. Prutzer. 2007. Subdeliverable 1.13. Welfare Quality Project – Swedish report on case-study 3 – Poultry producers, Welfare Quality, University of Göteborg, Göteborg.
- De Greef K., F. Stafleu and C. de Lauwere. 2006. "A simple value distinction approach aids transparency in farm animal welfare debate". *Journal of Agricultural and Environmental Ethics*, 19: 57-66
- Dockès A.C., Kling F., 2006. Farmers' and advisers' representations of animals and animal welfare. *Livestock. Sciences*, 103, 243-249

- Fjelsted Alroe H., M. Vaarst and E. Steen Kristensen. 2001. "Does organic farming face distinctive livestock welfare issues? A conceptual analysis". *Journal of Agricultural and environmental Ethics*, 14: 275-299
- Fraser D. 2001. "Farm animal production: changing agriculture in a changing culture". *Journal of Applied Animal Welfare Science*. 4(3): 175-190
- Hemsworth, P.H. 2003. "Human-animal interactions in livestock production". *Applied Animal Behaviour Science* 81 (3): 185-198.
- Hemsworth, P.H., G.J. Coleman, J.L. Barnett. and S. Borg, S. 2000. "Relationships between human-animal interactions and productivity of commercial dairy cows". *Journal of Animal Science*, 78 (11): 2821-2831.
- Hemsworth, P.H. and G.J.Coleman. 1998. *Human-Livestock interactions: the stockperson and the productivity and welfare of intensively farmed animals*. CAB International, New York.
- Huik van, M.M. and B.B. Bock. 2006. Subdeliverable 1.12 Welfare Quality Project – Report on case-study 2. Dutch cattle farmers on animal welfare, Wageningen University, Wageningen.
- Huik van, M.M. and Bock, B.B. 2006. Subdeliverable 1.13 Welfare Quality Project – Report on case-study 3. Dutch poultry farmers on animal welfare, Wageningen University, Wageningen.
- Kanis E., A.F. Groen and K.H. de Greef.2002. Societal concerns about pork and pork production and their relationships to the production system. *Journal of agricultural and Environmental Ethics*. 16: 137-162
- Kling-Eveillard, F., L. Mirabito, P. Magdelaine. 2007. Subdeliverable 1.13. Welfare Quality Project – French report on case-study 3 - Poultry farmers., Welfare Quality, Institut de l'Élevage, Paris.
- Lassen J., P. Sandoe and B. Forkman. 2006."Happy pigs are dirty! –Conflicting perspectives on animal welfare". *Livestock Science* 103: 221-230
- Lensink, B.J., I Veissier, and L. Florand. 2001. "The farmers' influence on calves' behaviour, health and production of a veal unit". *Animal Science*, 72: 105-116.
- Lund V. and I.A. Olsson. 2006. "Animal agriculture: symbiosis, culture, or ethical conflict?" *Journal of Agricultural and Environmental Ethics*, 19: 47-56
- Porcher, J. 2006. "Well-being and suffering in livestock farming: living conditions at work for people and animals". *Sociologie du Travail*, 48: e56-e70
- Rollin B. 1995. *Farm animal welfare*. Ames, IA: Iowa State University Press
- Seabrook M.F. and J.M. Wilkinson. 2000. "Stockpersons' attitudes to the husbandry of dairy cows". *Veterinary Record*, 147: 157-160.
- Seabrook, M.F. 1994. "The effect of production systems on the behaviour and attitudes of stockpersons". Pp 252-258 in *Biological basis of sustainable animal production*, edited by E.A. Huisman, J.W.M. Osse, D. van der Heide, S. Tamminga, B.J. Tolkamp, W.G.P. Schouten, C.E. Hollinworth and G.L. van Winkle. Wageningen Press, Wageningen.

- Seabrook, M.F. 1986. "The relationship between man and animals in managed systems" Pp. 211-222 in *Bio industrial Ecosystems*, edited by D.J.A. Cole and G.C. Brander, Elsevier, Amsterdam.
- Segerdahl P. 2007. "Can natural behavior be cultivated? The farm as local human/animal culture". *Journal of Agricultural and Environmental Ethics*, 20: 167-193
- Serpell, J.A. 2004. "Factors influencing human attitudes to animals and their welfare". *Animal welfare* 13: 145-151.
- Souquet, Catherine, Kling-Eveillard, Florence, Dockès, Anne-Charlotte. 2005. Subdeliverable 1.11. Welfare Quality Project – French report on case-study 1 - Pig farmers, Welfare Quality / Institut de l'Élevage, Paris.
- Te Velde, Hein, Aarts, Noelle and Woerkum van, Cees. 2002. "Dealing with ambivalence: Farmers' and consumers' perceptions of animal welfare in livestock breeding". *Journal of Agricultural and Environmental Ethics*, 15: 203-219.
- Tovey H. 2003. "Theorising nature and society in sociology: the invisibility of animals. *Sociologia Ruralis*, 43 (3): 196-213
- Tovey H. 20002. "Risk, morality and the sociology of animals – reflections on the foot and Mouth outbreak in Ireland". *Irish Journal of Sociology* ,12(1): 3-42
- Van Haaften E. and P.H. Kersten. 2002. *Veerkracht*. Wageningen: Wageningen university
- Wilkie, Rhoda. 2005. "Sentient commodities and productive paradoxes: the ambiguous nature of human livestock relations in Northeast Scotland". *Journal of Rural Studies*, 21: 213-230.