ARTICLES

Vegetarianism, Sentimental or Ethical?

Jan Deckers

Accepted: 11 May 2009/Published online: 4 June 2009 © Springer Science+Business Media B.V. 2009

Abstract In this paper, I provide some evidence for the view that a common charge against those who adopt vegetarianism is that they would be sentimental. I argue that this charge is pressed frequently by those who adopt moral absolutism, a position that I reject, before exploring the question if vegetarianism might make sense. I discuss three concerns that might motivate those who adopt vegetarian diets, including a concern with the human health and environmental costs of some alternative diets, a concern about inflicting pain on animals, and a concern with the killing of animals. While I argue that vegetarianism does not make sense in some situations, I hope that this paper shows that there are many good reasons why the adoption of vegetarian, and—even more so—vegan diets might be appropriate in some situations. In carving out this position, I focus primarily on the question whether a morally relevant distinction between the killing of plants and the killing of animals should be made. I engage primarily with the views of two of the most prominent authors on this issue, arguing that neither Peter Singer nor Tom Regan provide a satisfactory account on the ethics of killing nonhuman organisms. Two views are challenged in particular, the view that relatively simple animals such as molluscs, as well as plants, lack awareness, and the view that animals without a preference to continue living stand to lose little or nothing by being killed. I provide some evidence to support the claim that many share my view that it is more problematic to kill animals than to kill plants, before analyzing why some suppress the negative feelings they associate with killing animals. By exploring these issues I hope to shed some light on the issue of whether the feelings of those who adopt vegetarianism are sentimental or make sense, and to stimulate reflection amongst those with an interest in food ethics.

J. Deckers (🖂)

Institute of Health and Society, Newcastle University, Newcastle-upon-Tyne NE2 4HH, UK e-mail: jan.deckers@newcastle.ac.uk

Keywords Animals · Diet · Ethics · Food · Rights · Veganism · Vegetarianism

"the Colonel ... tells me he's going to have to shoot Bertha ... because ... she's no use for hunting any more ... I asked him not to ... I told him she was my favourite. 'Favourite!' he says, laughing at me. 'Lot of sentimental claptrap. She's just one of a pack of dumb beasts, boy, and don't you forget it'" (Morpurgo 2004, p. 59–60).

Introduction: A Definition of Sentimentalism

"Morality ... is more properly felt than judg'd of," Hume (1978, p. 470) famously wrote in the third book of his "Treatise of Human Nature". In this paragraph, Hume (1978, p. 471) emphasized his position that "an action ... is virtuous or vicious ... because its view causes a pleasure or uneasiness of a particular kind". Hume also recognized that what may be pleasurable to one person might not necessarily be pleasurable to another, raising the question of how agreement might be reached on what counts as virtuous (or good) and vicious (or bad). Rationalists (for example, Kantians) have tried to resolve this issue by claiming that some actions really are virtuous and that others really are vicious for everyone, and that they can be separated from one another by the use of reason, rather than by appealing to feelings or sentiments, the status of which would be inferior. This separation of reason from feeling is-in many waystypical for our Western modern philosophical tradition. The word "sentimental" in particular carries a negative connotation, which might reflect the inferior status attributed to feelings within this tradition. This is illustrated, for example, by the Oxford Encyclopedic English Dictionary's definition of the word, where it is defined as "showing or affected by emotion rather than reason" (Hawkins and Allen 1991, p. 1322). Yet even when those who are less convinced about the possibility of separating reason from feelings and emotions use the word "sentimental" to label a particular view in a moral debate, it is unlikely that the view in question carries their approval. While they might not dispute the value of feelings for morality, by using the word "sentimental" they may make the point that a particular view would be informed either by the wrong feelings or by an inappropriate weighting of different feelings.

Whatever one's view is on the connection between feelings (or emotions) and reason, and on their place within morality, I think that the expression that "X is sentimental" is frequently used by moral absolutists. Moral absolutism is a metaethical position that holds that, when a conflict of values comes to light in ethical debate, it is appropriate to determine which of the parties has the rational perspective. Accordingly, moral absolutists may seek to claim certainty for their beliefs by separating their reasons or feelings for or against a particular moral statement from the sentimental feelings that would underlie the views held by others. However, even when the belief that "X is sentimental" is expressed in a moral debate by those who favor another meta-ethical position, there is little doubt that the words "sentimental" and "sentimentalism" carry negative connotations.¹

To sum up, when the view is expressed that others rely on sentimental feelings in a moral debate, what is claimed is—most probably—that the views of others are definitely wrong (if moral absolutism is adopted) or—less probably—that their views are regarded to be wrong (if Pyrrhonian moral scepticism or a similar meta-ethical position is adopted).²

The Charge

With this in place, I would now like to comment on the above extract from Michael Morpurgo's novel "Private Peaceful" and illustrate how those who adopt or advocate vegetarianism have frequently been considered to be sentimental. In the above passage, the Colonel, one of the protagonists in Morpurgo's story, expressed his feeling of disapproval with Charlie, who had pleaded with the Colonel to save his favorite dog from being killed, by using the words "sentimental claptrap." The Colonel might claim either that Charlie's feeling was wrong (an inappropriate guide to action), or that he thought it was wrong. The first option would make the Colonel a moral absolutist while the latter might make him a Pyrrhonian moral skeptic. However, in view of what I stated before, the former option may be more likely. Rather than expressing the view that he disagreed with Charlie, by choosing to call his feelings "sentimental claptrap," the Colonel appears to try to stifle any debate about the validity of Charlie's feelings towards Bertha to determine what to do with her. The claim is absolute. Through his choice of words, the Colonel appears to aim to convey not only his belief that it would be wrong to refrain from killing Bertha on the basis of Charlie's feeling, but also that he has the moral high ground on this. He may have decided to refer to Charlie's feeling as sentimental because he believes it is a feeling that nobody with good moral sense ought to have or express. Had the Colonel said "I believe your feeling is sentimental, Charlie," he would have taken a less absolute stance. He would have refrained from stating that Charlie's feeling was

 $^{^{1}}$ Its meaning must not be confused with the meaning the word has when it is used to refer to the metaethical doctrine of "moral sentimentalism" or the doctrine that holds that moral evaluation is—in the words of D'Arms and Jacobson (2000, p. 722)—"somehow grounded in human sentiment". See also Slote (2003).

² It is not my ambition here to discuss these meta-ethical positions, as I have done so elsewhere (Deckers 2007). For the sake of clarity, however, I expand briefly on the nature of Pyrrhonian moral scepticism. If I adopt such a view, the possibility is accepted that someone who has radically different values from the values that I have may not have the wrong values. This does not follow from the conviction that there are no right or wrong values, yet from the belief that my values may be wrong, rather than the values of someone with radically different values. A paedophile, for example, may act in accordance with the particular feelings he has for children. Neither their actions nor their feelings may be wrong, even if they might appear to be very wrong to me. So the belief that there are things that are universally right and wrong is not abandoned, but a Pyrrhonian moral sceptic does not claim to know that these with different views are irrational. Because a Pyrrhonian moral sceptic suspends judgment about what is right and wrong, I believe that the adoption of such a meta-ethical stance, especially when combined with a quest for what is right and wrong, is congenial to the promotion of academic debate.

sentimental, expressing merely that it was his opinion that it was sentimental. Even so, the Colonel would still have disagreed with Charlie, suggesting that the right way to behave in the situation should not be determined by Charlie's feelings towards Bertha.

Morpurgo's story is just one illustration of the way in which the word "sentimental" can be used to discredit the validity of particular actions that might flow from the adoption of particular feelings towards animals. As in fiction, the feelings of those who take an interest in the well-being of animals in real life have frequently been characterized as such by those who have different views. In his book "Of God and Pelicans," McDaniel (1989, p. 111) tells the story of an experience he had when he was only 10 years old, when he went hunting with his father and felt that he had to prove that he was "a man" by shooting a white-tailed buck "without being sentimental about it." About a decade earlier, Cobb (1978, p. 139) wrote that "to be concerned about the feelings of animals has appeared sentimental, and philosophers are eager not to appear sentimental." And in 2008, Havnes (2008a, p. 152) published a book wherein he pointed out that members of the "animal welfare science community" claim that they have developed a more scientific account of animal welfare (resulting in fewer restrictions regarding the use of animals) compared with the "sentimental" account they perceive to have been provided by "animal liberationists". Applied more directly to the issue at hand, Adams (1990, p. 77) wrote that the "objection to the killing of animals" that motivates some to adopt vegetarianism "is equated with sentimentality, childish emotions, or 'Bambi-morality'." Similarly, when an environmental scientist from Newcastle University (UK) was interviewed for a research project, he made a claim that was about as strong as the claim made by the Colonel in Morpurgo's story when he characterized vegetarianism as a "fad" upon being asked what he thought about it (Bell et al. 2005, p. 13).³ Like the word "sentimental," the word "fad" denotes a definite absence of reason for a moral absolutist or a probable absence of reason for a Pyrrhonian moral skeptic.

The Need to Compare Vegetarian with Alternative Diets

The aim of this paper is to explore whether the feelings of those who adopt or advocate vegetarianism are—to use the words of Regan (1983, p. xii)—"irrational, sentimental ... or worse" or survive in the light of "a sustained commitment to rational inquiry." Imagine an Inuit living in the far north of Canada who refuses to eat animal products based on their feeling that there was something wrong with eating such products. If personal autonomy is valued over anything else, it would not be unethical for this person to decide that they would rather starve, rather than eat animal products, when no plant foods are or could be made available. However, if personal autonomy should be constrained, for example because such a person

³ The "Deliberating the Environment" project was carried out during 2003–2004 by Derek Bell, Tim Gray, Mary Brennan, Nicola Thompson, and Jan Deckers, and funded by the "Science in Society" programme of the Economics and Social Research Council.

might have parental duties, then it can be concluded that they should indeed not starve themselves. Therefore, for such a person, eating animals, as well as killing them, should be appropriate in that situation, and their commitment to vegetarianism could be perceived to be sentimental. They would be guided by a feeling or feelings that were kept in check insufficiently with other feelings that I believe that person ought to have, such as feelings towards their self-preservation or certain feelings towards others (which would not be compatible with self-starvation). Yet this need not imply that any feelings of compassion the Inuit might feel for the animals who are sacrificed to satisfy their dietary needs should be characterized as sentimental.⁴ While these feelings need not be sentimental, the killing of animals for food would be justified in spite of them. Yet if humans can meet their dietary requirements without the need to kill animals, the question must be asked if adopting a vegetarian diet might either be sentimental or make sense. I shall answer this question by comparing diets that avoid the killing of animals with diets that include the eating of animals who have been killed for that purpose. Unless I indicate otherwise, I shall assume that diets that include the bodies of animals require the intentional killing of animals for food, leaving aside the question if consuming the bodies of animals who had been killed naturally, accidentally, or mercifully (for their own good) survives ethical scrutiny.

Direct Health Costs

A first reason why a vegetarian diet might make sense relates to the fact that, in some situations, the human health costs associated with diets that include animal products exceed those that are associated with diets that exclude them. While a wide range of factors affect health and disease, those who adopt diets that are relatively low in animal products and that include a wide range of plant foods have a greater probability of being healthy than those who adopt diets that are relatively rich in animal products. While the health costs and benefits of consuming animal products vary depending on which products are consumed as well as on environmental and genetic differences between people, there is sufficient evidence to support the view that diets that include relatively small quantities or no animal products are associated with lower levels of obesity, dyslipidaemia, hypertension, cardiovascular diseases, stroke, type 2 diabetes, and some types of cancer compared with diets that include relatively large amounts of animal products (World Cancer Research Fund/American Institute for Cancer Research 2007; World Health Organization 2003; Messina and Burke 1997; Campbell and Campbell 2006). This is related to the fact that animal products are generally rich in protein, calories, and saturated fats, and poor in fiber, complex carbohydrates, and antioxidants. Reflecting on a range of dietary studies Garrett (2007, p. 223) concluded, therefore, that those who consume animal products can expect to experience "poorer health and a shorter life span." This interpretation is problematic, however, as there is a lack of evidence to support the view that diets that include animal products are, per

⁴ In this paper, I use personal pronouns to refer to nonhuman animals as I agree with Kheel (2008, p. 7) that using the words "that" or "it" "fail to respect subjective identity".

se, associated with poorer health outcomes. Rather, it has been argued that some omnivorous diets are deficient simply because they do not include sufficient quantities of nutrients that are obtained from the consumption of plants (Ginter 2008). The number of people who adopt such unhealthy diets is rising, together with increasing demand for animal products. It has been estimated that, between 1980 and 2002, the per capita consumption of meat and milk has increased from 14 to 28 kg and from 34 to 46 kg, respectively in "developing" countries, and from 73 to 78 kg and from 195 to 202 kg, respectively in "developed" countries (Steinfeld et al. 2006, p. 15). This makes omnivorous diets that lack adequate amounts of nutrients that are obtained from the consumption of plants morally suspect, as those who suffer the consequences of inappropriate diets not only suffer the consequences themselves, but also affect others in negative ways.

Other Costs

These costs extend beyond treatment costs and the costs incurred by the fact that those who suffer from diet-related diseases may need to take time off work. Even when those who consume animal products may not experience any ill effects themselves, their consumptive behavior may still be associated with relatively high costs that are borne not only by themselves, but also by others. As some of these wider costs have been documented in a recent paper published in this journal (Ilea 2009), I shall limit myself to describing no more than some of the most prominent concerns. A review of 1,407 species of human pathogens found that more than half were zoonotic and the same study found that zoonoses account for almost threequarters of recently emerged human diseases (Woolhouse and Gowtage-Sequeria 2005). This shows that the lives of farm animals and the ways in which they are treated present significant public health challenges, exemplified not in the least by the recent emergence of the H5N1 avian influenza virus, yet also by a whole range of other diseases, for example those related to ingestion of Cryptosporidium, which can be present in drinking water (Greger 2006). Ilea also refers to a range of health problems that can occur amongst those who live or work on or near animal farms, as well as amongst those who work in slaughterhouses (Ilea 2009, pp. 155–158).

Farm animals also consume a large share of the world's land, water, and energy resources. The human population is outnumbered by the number of farm animals by more than three to one, more than seventy percent of all agricultural land is used for the production of farm animal products, and over one-third of the world's harvest of cereals is fed to them every year (Steinfeld et al. 2006, pp. xxi, 12). The farm animal sector uses relatively large amounts of energy compared to other agricultural sectors. Energy derived from fossil fuels is often needed to produce feed, to transport animals and their products, and to ventilate, heat, or cool places in which animals spend their lives. As farm animals can be fed on land that would not be (most) suited to grow crops for direct human consumption, it is not the case that all land could be used more efficiently if it was used to grow crops for direct human consumption. However, it must be acknowledged that research has found that, while "grazing occupies 26 percent of the terrestrial surface," extensive grazing systems yield "less than 9 percent of total meat supply" (Steinfeld et al. 2006, p. 280). In

other words, a relatively large amount of land is used to produce relatively few outputs. Furthermore, some of the land that is currently used either for animal grazing or to grow animal feed could be used by humans for other purposes, for example housing, the production of wood or biofuels, or recreation. Farm animals not only fail to convert some plant matter into body parts that are or could be eaten by humans, yet also convert the plants they eat into manure, urine, and gases that not only fertilize, but also pollute the environment. As the animals themselves, as well as many intensive facilities used to rear them, concentrate, rather than disperse plant nutrients, many nutrients end up in waterways and in the air, rather than being taken up by plants.

The land, water, and energy required to feed farm animals, and the pollution produced by them might be problematic in a world marked by a growing human population, growing food prices, and growing land and water scarcity. The number of farm animals is rising rapidly, especially to satisfy the growing demand for animal products amongst the burgeoning middle classes (Steinfeld et al. 2006, p. 9). In China, for example, diets are becoming more "Westernized" and demand for animal products has grown exponentially in recent years. According to data produced by the Food and Agriculture Organization of the United Nations, the total per capita meat consumption of the Chinese population increased about fivefold during the 25 years leading up to 2003 (from 11 to 54 kg per person) (FAO 2008). And the Intergovernmental Panel on Climate Change (henceforth: IPCC) used the same data to estimate that, in the developing countries of Asia in general, the production of meat and milk increased by more than 12 times and 4 times, respectively between 1961 and 2004 (IPCC 2007, p. 505). Some of the animal feed used in Europe and Asia is produced in countries as far away as Brazil, a country where large areas of rainforest and other precious habitats, such as the cerrados, are being degraded to provide feed, largely in the shape of soy, for the animals that are reared to satisfy the growing human appetite for their products (Steinfeld et al. 2006, pp. 43–44; Garnett 2007).⁵ While the authors of a report with the title "Livestock's Long Shadow," published by the Livestock, Environment, and Development Initiative (LEAD), a group co-ordinated by the Food and Agriculture Organization (henceforth: the LEAD study) write that, "it is probably true that livestock do not detract food from those who currently go hungry" (Steinfeld et al. 2006, p. 270), this has been contested. Ilea, for example, has written that "to consume fewer animal products can have a far-reaching effect on reducing (human) suffering in the world" (Ilea 2009, p. 164). While this issue merits further discussion, it is worth noting that at least three factors might contribute to a climate in which human undernutrition could be caused by a growing competition for land between those who farm animals and others. Firstly, the diets of farmed animals are shifting more towards feed crops (and further away from grass consumption) (Steinfeld et al. 2006, pp. 44–46). While the LEAD study has argued rightly that a greater reliance on feed crops might curb the methane emissions produced by ruminants, its support

⁵ Land degradation has been defined as "a reduction of resources potential by one or a combination of processes acting on the land, such as: (1) soil erosion by wind and/or water; (2) deterioration of the physical, chemical and biological or economic properties of soil; and (3) long-term loss of natural vegetation" (UNEP 2002: cited in Steinfeld et al. 2006, p. 29).

for "a relative expansion of concentrate-based production systems, in particular chicken and other poultry, at the expense of ruminant production" (Steinfeld et al. 2006, p. 236) has been criticized on the basis of the view that it might encourage the clearing of land for their production or for the production of food and other resources used directly by humans (Garnett 2008, p. 84). This is so because the diets of monogastrics are more reliant on foods that could be eaten directly by humans. Secondly, the high yields that we have enjoyed in recent decades owe a great deal to the large-scale use of artificial fertilizers and pesticides, which are produced mainly from dwindling oil resources. Without these chemicals, more land may be required to obtain similar levels of outputs (Smil 2000). And thirdly, the biofuel sector is becoming a growing competitor for land (World Bank 2007, pp. 70–71).

Another issue is the contribution of the farm animal sector to global climate change. If the greenhouse gases produced by deforestation and other land use changes for the sake of animal farming are included, the total amount of greenhouse gases produced by the farm animal sector have been estimated to account for 18% of all anthropogenic greenhouse gas emissions, exceeding the greenhouse gases produced by global transportation (Steinfeld et al. 2006, p. xxi).⁶ A much lower estimate is provided in a report published by the IPCC, which estimated that agriculture contributes 10-12% of all anthropogenic greenhouse gas emissions (IPCC 2007, p. 63). However, it must be noted that the emissions from agriculturally induced land use changes were not taken into consideration in this report. These were taken into account in a report prepared for Greenpeace by a team from the University of Aberdeen, which estimates agriculture's contribution to be between 17 and 32% of all anthropogenic emissions-the broad range reflecting (largely) the difficulties of calculating emissions produced by land use changes (Bellarby et al. 2008). While it is beyond the scope of this paper to determine which study reflects the facts most accurately, it is clear that these emissions could be reduced if some people made a range of dietary changes, which may include a reduction in the consumption of farmed animal products. A working group of the IPCC, for example, has concluded that "a shift from meat towards plant production for human food purposes, where feasible, could increase energy efficiency and decrease greenhouse gas emissions" (2001, Sect. 3.3.4: cited in Compassion in World Farming 2007, par. 1.3), and that greenhouse gas emissions might "escalate ... if there are more livestock" (2007, p. 500). If our sole objectives are to reduce greenhouse gases and to curtail the use of fossil fuels, this need not imply, however, that vegetarian diets must always be preferred. This point has been made, for example, by Kerasote (2005), who used to kill wild elk living near to his home in Wyoming. Kerasote calculates that 79000 kilocalories of fossil fuel energy were

⁶ More specifically, the LEAD study has estimated that the farm animal sector is responsible for 65% of all anthropogenic emissions of nitrous oxide, one of the most potent greenhouse gases, and for 37% of all anthropogenic methane emissions (Steinfeld et al. 2006, p. xxi). While anaerobic digestion plants can turn some manure into biogas, which can be used as an energy source, as well as digestate, which can be used as a soil improver, the use of such plants is not always feasible. Since the economic viability of such plants depends on the availability of large quantities of manure or slurry, they rely on intensive facilities, raising a range of human and nonhuman welfare issues. In extensive systems, as has been remarked by Working Group III of the IPCC, "there is little opportunity for manure management, treatment, or storage" (IPCC 2007, p. 511).

used to kill, process, and store the elk he used to kill every year, and that he would have used almost twice as many fossil fuels had he derived a similar quantity of calories from potatoes grown 50 miles from his home. However, he also remarks that these quantities are dwarfed by the fossil fuels used in the production of beef (2005, p. 396).

If the assumption is made that it is good to limit the risks and costs associated with some of these issues, it is hard to see why the feelings of those vegetarians who might have feelings of concern about some of these issues should be regarded as sentimental. Indeed, diets that are more parsimonious with resources compared to other diets, are associated with smaller amounts of greenhouse gas emissions, and reduce the risks of zoonoses and other diseases seem to make sense. If the size of the global population of farm animals could be reduced by the adoption of vegetarian diets, these risks and costs could be reduced.

Vegetarianism and Respect for Nonhuman Animals

Rather than being motivated by a concern for the human costs associated with particular omnivorous diets, vegetarians might also be motivated to adopt their eating preferences out of concern for the impact of omnivorous diets upon the lives of nonhuman animals.

Inflicting Pain on Animals

The first of these is the view—adopted by Singer (1990, p. 235)—that "nonhuman animals can feel pain," and that we have a *prima facie* obligation to refrain from inflicting unacceptable levels of pain on animals.⁷ The argument proceeds by saying that the methods used to rear and kill animals inflict unacceptable levels of pain on them, and that vegetarian diets must therefore be preferred.⁸ The underlying assumption is that plants cannot feel pain, and that the killing of plants would therefore be preferable to the killing of animals where this would cause them to experience unacceptable levels of pain. With regard to the underlying assumption, I agree with Singer's (1990, p. 235) view that "the belief that plants feel pain appears to be quite unjustified." Nevertheless, there is considerable debate on the issue

 $^{^{7}}$ Following Broom (2007, p. 102), pain could be defined as "an aversive sensation and feeling associated with actual or potential tissue damage".

⁸ A further question is how much pain could be tolerated, for example if humans should avoid any deliberate infliction of pain on nonhuman animals, or—as Fox (1978, p. 113) has claimed—merely make sure that they are not "made to suffer needlessly or excessively," or just oppose "the cruelty involved in factory farming," which Singer (1978, p. 124) has defined as his "argument for vegetarianism". Incidentally, while vegetarian diets do not fail to inflict pain on animals, they might inflict less pain on them compared with omnivorous diets. For a defence of this position, see Matheny (2003) and Lamey (2007). The latter also supports the view—which I endorse—that a morally relevant distinction should be made between accidental (yet foreseeable) and deliberate harm, whereby the former is justified more easily than the latter. On this view, diets that inflict pain on a given number of animals accidentally would, *ceteris paribus*, be morally preferable to those that inflict pain deliberately on the same number of animals with equal capacities to feel pain.

whether all animals have the ability to feel pain. One group of animals that has enjoyed a fair amount of discussion on this issue is the molluscs. This phylum includes not only snails, oysters, scallops, and mussels, but also the class of cephalopods, including cuttlefish, squids, and octopuses. In the first edition of "Animal Liberation," Singer (1976, p. 188) wrote that the line between sentient and insentient organisms could be drawn "somewhere between a shrimp and an oyster," adding in the second edition that he "continued occasionally to eat oysters, scallops, and mussels for some time after (he) became, in every other respect, a vegetarian" (1990, p. 174). At some stage between the first and the second edition of his book, however, Singer (1990, p. 174) changed his mind and his dietary stance, arguing that "one can ... have little confidence in saying that they do not feel pain." Like Singer, Regan (1983, p. 30) has expressed the view that he is inclined to think that a snail cannot feel pain, and even more tempted to think so "about animals less developed than a snail." And more recently, Dombrowski (2006, p. 225) has expressed his doubt on the issue if clams (bivalves) can feel pain, arguing that they "only have a cluster of ganglia" and therefore do not possess a "central nervous system," while Varner (1999, p. 85) has claimed that "a good case can be made for saying that invertebrates (with the possible exception of cephalopods) probably cannot feel pain."9

Many authors have now concluded that cephalopods might be able to feel pain, a view that is given some support by these authors and that I shall not engage with here (e.g., Moltschaniwskyj et al. 2007). However, I want to explore briefly, using the example of the common mussel, if the view that no other molluscs might be able to experience pain can be maintained. In the light of behavioral, anatomical, and physiological observations, this could be doubted. Behaviorally, in spite of the fact that the nervous systems of common mussels are organized very differently compared to the way in which the human nervous system is organized, these animals nevertheless are capable of responding very quickly to environmental stimuli. For example, they respond very quickly to the presence of noxious chemicals in the water by closing their shells to avoid exposure (Krasne and Glanzman 1995).¹⁰ Anatomically, while it is true that—to use the words of Step (2008, p. 48)—"there is no grand centre of the nervous system as furnished by our brain," there is nevertheless "a system of large and small nerve-threads traversing

⁹ A similar doubt has been expressed by Warren (2000, p. 62 footnote 28), who complicates the picture by driving a wedge between younger and older oysters where she writes that "like many bivalves, oysters begin their lives as free-swimming larvae, which appear to have greater capacities for perception and sentience than do the much more sedentary adults." While I shall not engage with this issue here, the existence of such a distinction between younger and older oysters seems doubtful.

¹⁰ The ability to respond appropriately to a range of stimuli is by no means an isolated phenomenon in the world of the invertebrates. An experiment with snails (*Helix* sp.) carried out by Balaban and Maksimova (1993) required snails to displace the end of a rod to receive electrical stimulation. Snails who received stimulation to the parietal ganglion decreased the frequency of touching the rod, while snails who received stimulation to the mesocerebrum (which fulfils a role in sexual activity) increased the frequency compared to a control group. Sherwin (2001, S111) has commented that "if this experiment had been conducted with a vertebrate species, we would almost certainly ascribe these responses as being due to the animal experiencing sensations of pain or discomfort when self-stimulating the parietal ganglion, and pleasure when self-stimulating the mesocerebrum."

the length and breadth of the animal, connected here and there by loops (*commissures*) and from certain knots (local brains or *ganglia*) sending off a number of short branches," which led him to believe that they are "no doubt highly sensitive." And physiologically, when they are injured, mussels produce substances that are similar to the opioids that mammals release to produce analgesic effects when they are in pain (Stefano et al. 1981, 1998). Based on these observations, I question the view that they may not be able to feel pain. While this does not establish the validity of Singer's (1990, p. 236) claim that it would "be better to eat plants than to eat animals," vegetarians might argue that it would at least be better to consume organisms that can be presumed to be incapable of feeling pain than to eat others.

Even if the view that molluscs might be able to feel pain is accepted, this still does not answer the question of where the line between sentient and insentient organisms should be drawn. While a single-celled organism that belongs to the Amoebozoa (a kingdom of organisms usually considered to be a sister group to fungi and animals) may not possess any body parts that might have a specific sensory function, its complexity may nevertheless be greater compared to a cell that is part of a multicellular animal. This is so because it needs to perform all the activities necessary to maintain life within one cell, lacking the ability to delegate specific functions to the different cells that compose multicellular animals. The Amoeba proteus, for example, contains a nucleus within a cytoplasm. The cytoplasm can change shape by means of constantly changing projections, called pseudopodia, which are used for locomotion and feeding. These pseudopodia can be withdrawn and remain stationary for some time when the animal is exposed to unfavorable conditions, such as cold or drought. Several species of Amoebozoa have also been observed to be able to move away from bright light and strong chemical solutions, and to discriminate between different types of food (Wildschutte and Lawrence 2007). While these actions might be taken to be innate reflexes, rather than learnt behavior, we also have evidence that some amoebae are capable of the latter. Recent experiments with the true slime mould *Physarum polycephalum* have shown that some amoebae can adapt their behavior in anticipation of the arrival of unfavorable conditions, when they have learnt to expect the imminent arrival of such conditions (Saigusa et al. 2008). This prompted the authors to speculate that "information processing by unicellular organisms might represent a simple precursor of braindependent higher functions" (Saigusa et al. 2008, p. 1). We do not know if any of these actions might be associated with feelings of pleasure or pain, yet I take the fact that amoebae demonstrate avoidance behavior of unfavorable stimuli as indicative of a capacity to experience pain. An earlier experience leaves a mark, which then helps the amoeba to show appropriate behavior to avoid exposure to a similar experience in the future. Such a mark might be a sensation of pain, as hypothesized by Jennings (1906, p. 336) more than a century ago where he wrote that "if amoeba were a large animal, so as to come within the everyday experience of human beings, its behavior would at once call forth the attribution to it of states of pleasure and pain." While it is beyond the scope of this paper to settle this issue, as well as the general question if all animals—as well as some organisms who may not be classified as animals—are sentient, I agree with the view—held by many animal

ethicists—that we have a *prima facie* obligation to refrain from inflicting unacceptable levels of pain on sentient organisms. If we have such an obligation, it is hard to see how vegetarian diets could be regarded as sentimental if they inflict less pain on others compared to other diets.

A remaining problem, however, is that it seems hard to justify a moral difference between killing plants and killing sentient animals on the basis of the capacity to feel pain alone, at least if the assumption is made that it is possible to raise and kill animals without inflicting unacceptable levels of pain on them. In other words, this position would provide an argument to abstain from eating the products derived from animals who had suffered unacceptable levels of pain because of the ways they had been reared or killed, yet not to abstain from eating other animal products. A vegetarian might respond, however, that most methods in which animals are reared and killed involve the infliction of some pain upon them, and that no pain whatsoever should be inflicted on animals, at least not unless it is either in their interests (for example, to suffer a short and painful death through human hands rather than protracted suffering) or it should be tolerated to avoid a significant cost to human health (for example, if the alternative is starvation).

Killing Animals

Alternatively, vegetarians might grant that it may be possible to rear and kill animals either painlessly or without inflicting unacceptable levels of pain on them, yet that the consumption of all animals who had been killed for food should still be avoided on the basis of the wrongness of killing (particular) animals without good justification. Doing so would be a failure to respect our duty not to harm those animals who would be harmed by being killed. It is on this basis that Regan (1983, p. 346), arguably the most well-known advocate of "animal rights," has claimed that "vegetarianism is ... obligatory". Yet if we assume that those vegetarians who adopt the view that killing an animal without good justification is wrong do not abstain from eating plants, the counterargument is that the same could be said about killing a plant, as it would fail to respect the plant's right to life.¹¹ The position that a plant has a prima facie right to life could be based on the view that plants have interests (for example, in water and sunlight, or in not being chopped down) that should be protected.¹² For the argument to be valid, it must therefore be argued either that we should choose to inflict harm on as few individuals as possible, or that violating an animal's right to life is more problematic than violating a plant's right to life. The first option, which Regan (1983, p. 305) has called a "mini-ride principle," could be

¹¹ While it is beyond the scope of this paper to defend that plants have such a right, I share the view adopted, for example, by Taylor (1986)—that plants can be harmed and should not be harmed without justification. While Taylor does not apply the concept of "right" here, it could be argued that they therefore have a *prima facie* right to life. For such a right to exist, all that is required is that the lives of plants deserve at least some iota of moral respect (which we owe to them, rather than to others who might benefit from their lives). The view that they do has been defended recently by the Swiss Federal Ethics Committee on Non-human Biotechnology (ECNH) (2008).

¹² For a recent advocate of this position, see Gamlund (2007, p. 8). Gamlund (2006) refrains from using the "rights" concept in this context.

chosen by vegetarians who make the claim that fewer individuals are harmed by their food choices than by the food choices made by omnivores, who are accountable not only for the deaths of the animals they eat, yet also for the large numbers of organisms that these animals have eaten themselves. If the latter option is chosen, it must be shown that we have a greater *prima facie* duty to refrain from killing an animal than to refrain from killing a plant. On this issue, Regan has claimed that at least those animals who are "subjects-of-a-life" can be distinguished from plants, as well as from other animals: "individuals are subjects-of-a-life if they have beliefs and desires; perception, memory, and a sense of the future, including their own future; an emotional life together with feelings of pleasure and pain; preference- and welfare-interests; the ability to initiate action in pursuit of their desires and goals; a psychophysical identity over time; and an individual welfare in the sense that their experiential life fares well or ill for them" (1983, p. 243). Such subjects would include "normal mammalian animals, aged one or more" (1983, p. 247), yet Regan acknowledges that other animals may be included as well. At the same time, he writes that "it may be that animals ... which, though conscious and sentient ..., lack the ability to remember, to act purposively, or to have desires or form beliefs ... can only properly be viewed as ... lacking any value in their own right" (1983, p. 246).¹³ While Regan (1997, p. 110) does not question his "subjects-of-a-life" criterion and definition explicitly, in later work he appears to be more inclusive, initially by favoring "noncognitive criteria ... such as sentience," and then by making a distinction between those who are "in the world but not aware of it" and those who are (2004, p. xvi).

In his book "A Theory of General Ethics" Fox (2006) has claimed, with regard to the last distinction that merely being aware of one's environment is not sufficient for an organism to be granted a *prima facie* right to life. Fox argues that only organisms with the ability to value a continued life can be said to lose anything when their lives are taken away, and that mere awareness of one's environment is not sufficient to ground the claim that an organism has an interest in a continued life. In Fox's view, organisms that lack such an interest would not be harmed by being killed. Contrary to the claims made by Singer and Regan (amongst others), Fox (2006, pp. 207–245) presents a large body of evidence to support his view that only human beings can be assumed to have such an interest, before concluding that nonhuman animals do not possess a right to life. While it is beyond the scope of this paper to examine Fox's evidence, I believe that, even if the assumption is made that nonhuman animals take no interest in continued life, such an interest is not needed to ground the claim that the painless killing of animals may be morally problematic for reasons unrelated to human interests in their being alive. While nonhuman animals may not be able to attribute value to their lives, they still value those things that make them flourish by seeking them, and try to avoid things that might harm them. It could be argued, therefore, that for animals to be given more moral significance than plants, animals

¹³ Like Regan, Singer appears to focus his attention on a rather narrow selection of animals when he discusses the ethics of killing animals. While he does not answer the question of which "capacities are relevant to the question of taking life," he proceeds by stating that "the life of a self-aware being, capable of abstract thought, of planning for the future, of complex acts of communication, and so on, is more valuable than the life of a being without these capacities" (1990, p. 20).

need not be able to value their lives, yet only to seek out those things that contribute to their flourishing. To deprive them of these things would be problematic. In this vein, Kaldewaij (2006, p. 531) has suggested—based on Thomas Nagel's views— that animals are harmed by death because it "deprives them of the goods that continued life would have brought them."

This takes us to a more serious problem with Regan's account. While Regan (2004, p. xvi) has suggested that "amoebae... are in the world but not aware of it," this could be doubted in light of what I wrote before about what is known about the lives of at least some amoeboid organisms. Furthermore, could it not also be said of plants that they are aware of their environments and value the things that keep them alive and make them flourish, and that their future experiences of these goods would be foregone by an early death? If they do, it would surely be arbitrary to distinguish between plants and animals on this basis. In this regard, we have evidence that at least some plants have developed elaborate ways to protect themselves against threats. For example, the *Mimosa pudica* rolls up its leaves upon being touched, which may reduce its chances of being eaten. If this plant, as well as other plants, also has some awareness of the things that are good and those that are bad for them, it may not be possible to distinguish between animals and plants on this basis. Many people resolve this problem by rejecting the view that plants possess awareness. In the Whiteheadian view I adopt, by contrast, the whole world is composed of individuals that possess some awareness of themselves and of their surroundings.¹⁴ These individuals have varying capacities to direct their own activities. While Whitehead did not think that plants are aware, he thought that their cells are, so that it could be said that plants have awareness in them.¹⁵ While I shall not engage with the view if a plant as a whole is aware or if only its cells are aware, if this Whiteheadian view is correct, the presumption that a moral difference exists between the killing of plants and the killing of (some or all) animals cannot be based on the view that plants have no awareness (in them).

Nevertheless, it is my view that animals normally stand to lose more by an early death, and that humans should therefore refrain from killing and consuming them where alternative options are available. Notwithstanding situations when their suffering may be so great that it may be in their best interests to be put to death quickly (with the intention to put them out of their misery) and situations where the quality of human life would be affected significantly by a failure to kill animals, it is my view that there is something that is morally problematic,

¹⁴ The name that has been given to this ontology is panexperientialism, or the view that reality is a collection of experiencing things. For this notion of "experience," see for example Cobb (1978, p. 138): "Experience has a subject-object or self-world structure. All experience is experience of something or, more accurately, of many things. It is the way in which what is given objectively becomes subjectively appropriated, integrated, and transcended. Within experience, therefore, we can distinguish *what* is felt from *how* it is felt. The "what" is the objective pole of the experience, the "*how*" is the subjective pole." The chief alternatives to this ontology are materialism, wherein only material things that lack awareness are deemed to exist; and dualism, whereby experiencing things exist separately from such material things or emerge from them. For a defence of panexperientialism against these alternatives, see Griffin (1998).

¹⁵ Accordingly, Whitehead (1978, p. 108) wrote that "a tree is a democracy", yet his wife Evelyn disagreed with him on this issue (Weiss 1980).

rather than sentimental, about killing animals. This position is controversial. Bentham (1907, Chapt. 17, Par. 1), for example, has claimed that the death an animal suffers when they are killed by humans might be "a speedier, and by that means a less painful one, than that which would await them in the inevitable course of nature." More recently, Peter Singer wrote in a similar vein that he "can respect conscientious people who take care to eat only meat that comes from ... animals ... (of a species incapable of having desires for the future), who have a pleasant existence in a social group suited to their behavioral needs, and are then killed quickly and without pain" (1990, pp. 229-230).¹⁶ If Fox is correct that no nonhuman animals have "desires for the future," Singer provides not much reason to believe that there would be something wrong about killing animals painlessly, an idea which—in any case—he regards to be "strictly unnecessary" (1990, p. 21). Yet, at the same time, Singer acknowledges that he "still" has "doubts about this issue," even making the claim that killing an animal who has no "desires for the future (...) still seems repugnant" (1990, p. 228). In his attempt to resolve the issue, he is very brief, suggesting that "killing animals for food ... makes us think of them as objects," which, in turn, may foster the development of attitudes that "lead to ... mistreatment" (1990, p. 229). Yet when we kill plants, we might also think of them as objects, and it is therefore unclear why the painless killing of animals would be more problematic compared to the killing of plants. A similar problem applies to Regan's (1983, p. 417) account, who has argued that, "even assuming birds and fish are not subjects-of-a-life, to allow their recreational or economic exploitation is to encourage the formation of habits and practices that lead to the violation of the rights of animals who are subjects-of-a-life." Once again, the problem with this view is that the same could be said about plants. It could be said that the "economic exploitation" of plants should also be avoided because of the possibility that it might encourage the exploitation of organisms that are subjects-of-a-life. In other words, Regan fails to provide an answer to the question of why the killing of animals who are not considered to be subjects-ofa-life would be any more problematic compared to the killing of plants. If plants have some awareness (in them), Regan's (2004, p. xvi) later distinction between those who are "in the world but not aware of it" and those who are is not convincing either.

Neither Singer's nor Regan's account, therefore, provides a satisfactory answer to the question of why it would be more problematic to take the life of an animal than to take the life of a plant. While I am at one with Singer where he expresses that this issue presents a "real difficulty" (1990, p. 228) and with Kheel (2008, p. 235) who has claimed that her view that it is more problematic to take the life of an animal relies on "non-provable convictions," I believe nevertheless that more can be said on the issue. I doubt whether the harm of killing rests in the fact that future experiences are foregone as it is always possible to replace animals with other animals who might have valuable experiences. Rather, I think that the reason why

¹⁶ I take Singer to mean that he can respect such a stance, rather than respect those who adopt such a stance.

killing an animal is more problematic relates to the fact that animals have a greater dislike of being killed compared to plants. Animals do not need to have a desire to continue living or to be able to reflect on the idea of being killed in order to dislike being killed. We know that they have this dislike as they either defend themselves or flee when their lives are threatened. When plants are threatened, this is less clear as plants do not seem to possess the capacity to resist being killed to the same degree that animals do. The threat of being killed does not appear to mean much to them. The *Mimosa pudica*, for example, does not possess the same capacity to learn from past experiences as has been shown to exist for the true slime mould Physarum polycephalum. Lacking the ability to learn to distinguish between being touched by a harmless stimulus and by a potentially harmful stimulus, it will respond in a similar fashion irrespective of the kind of stimulus that is provided. This lack of ability to respond to new challenges in accordance with what has been learnt from past experiences suggests that plants have more limited abilities to respond to external factors compared to animals and at least some other organisms. Since plants are less aware of their surroundings, it does not mean much to them to be controlled by external factors. Organisms who are capable of more complex modes of experiencing, however, can take in more information, and adapt themselves more rapidly and flexibly.

I contend that it is more problematic to take the life of a nonhuman organism with a relatively more sophisticated ability to experience and respond to negative stimuli than to take the life of a nonhuman organism with a more limited ability to experience and respond to such stimuli. Since plants or their cells may have no more than a dim awareness of the things that are in their interests, fewer agents with relatively more developed capacities for what Charles Birch and John Cobb have called "richness of experience" are harmed when plants are preferred over animals in the human diet, which must be valued positively (Birch and Cobb 1984, p. 153). Yet when we take control over the lives of animals and at least some minute organisms who may not be classified biologically as animals, we take control over the lives of organisms who have greater degrees of conscious control over their own actions. By subjecting such organisms to our control, we either remove or reduce the control they have over their own lives.¹⁷ And since this capacity for richness of experience may have increased with the development of the nervous system, and of increasingly complex nervous systems, I also hold the view that killing animals with more developed capacities for richness of experience is more problematic compared to killing animals with less developed capacities. While it is beyond the scope of this paper to propose a theory of the relative moral significance of different organisms, for the purpose of this paper I conclude, therefore, that, when a vegetarian diet is chosen on the basis of the view that such a diet avoids the deliberate killing of animals for food, such a diet makes good sense, at least if it is effective at avoiding the deliberate killing of animals for food.

¹⁷ The recognition that animals can exert a great deal more control over their lives compared with plants may also underlie the fascination some people have with controlling animals. By controlling the lives of other animals, for example through hunting and butchering, people may gain a temporary release from the insecurity that may result from the realization that our own lives are not controlled completely by our own decisions.

Common Sentiments and Their Suppression

If Engster (2006, p. 534) is justified in supporting "care ethics," which he claims "capitalizes on the already existing moral sentiments that many human beings feel toward their pets and other animals," it is worth exploring if my sentiments about the killing of animals might be shared by others. While this does not make it right, I think the feeling that it is more problematic to take control over the life of an animal than over that of a plant is shared by many people. Yet I also think that it is being suppressed by many, perhaps because—as Haynes (2008b, p. 474) has stated—"our sentiments may have been socialized to not care about" animals. It is perhaps because it is experienced as an inconvenient truth that it might be suppressed with such great force as how it was done by the Colonel in Morpurgo's story. Relegating this feeling to the domain of what is outside reason, which might motivate those who use the adjective "sentimental," rather than to what is outside their perception of what is reasonable, may be a strategy used to hide feelings of insecurity, used by those who are ultimately not all that convinced about what they claim to believe. Seen in this light, expressing that "X is unreasonable" may provide greater comfort than expressing mere "belief that X is unreasonable." When someone cherishes a belief that they are not so sure about, yet that they are very keen to hold on to, expressing the view that something is reasonable or unreasonable may be more comforting than expressing mere belief that something is reasonable or unreasonable. The former expression seeks to recruit support for one's belief by expressing rhetorically that others share the belief, which might be an attempt to pre-empt debate. This raises the question why some people might suppress their negative feelings (for example, a feeling that it is not right, or a feeling of discomfort) about killing animals.

I recounted already Jay McDaniel's story of when he was asked by his father to kill a buck when he was only 10 years old to prove that he was "a man." I had many similar experiences as a teenager when I was told by my fellow pigeon-fanciers that I was not a man if I could not bring myself to killing those pigeons that were either not good enough or too old to be good at racing. Like McDaniel, I became a man by developing the ability to kill pigeons, yet my negative feelings about doing so never left me. Like McDaniel, I now much prefer not to be a man if this is what it means to be one. What these examples show is that these negative feelings about killing animals can be overcome by other feelings, for example the feeling of being a man, a hunter, or a pigeon fancier.¹⁸ Yet the question must be asked if the creation of these feelings. While both McDaniel and I might have enjoyed the feeling of "being a man" by virtue of what we did (I never did), I adopt the view that the anticipated value of this feeling should have been outweighed by the negative feelings we associated with killing animals. While other values might have been served by

¹⁸ Or, for a farmer, an important feeling might be some kind of satisfaction associated with being able to reap the financial benefits from using animals. Salt (1900) wrote that in a "system of society, where almost everything is measured, even for men, by the merely *commercial* standard, it is impossible that animals should be generally treated with gentleness and consideration," and he "feared that at least another century" would have to pass before this might have changed (1900, p. 217).

killing these animals, the thoughts that the animals might have suffered more had they died naturally, or that the method used to kill them might have brought about a painless or fairly pain-free death are insufficient to dispel my negative feelings.¹⁹ Both McDaniel and I seem to have been affected by a patriarchal discourse that objectifies animals as well as women, which allowed each of us to become "a man." At the same time, not every meal that includes the eating of animals who have been killed needs to be seen as a confirmation of what Adams calls its "phallocentric meaning," which she believes "proclaims the disempowering of women" (1990, pp. 179, 187). What is more, I think that Adams's claim that "killing animals is wrong" does not apply to all situations (1990, p. 177).

Why We Should not Suppress the Fact That it May Sometimes Be Necessary to Kill Animals

As I argued before, providing the example of the Inuit in Northern Canada, killing and consuming nonhuman animals should be acceptable in some situations. Apart from situations where no adequate plant food supplies can be secured and no plant foods can be obtained without incurring high ecological costs, I think many other situations justify the killing of animals. For example, wild and feral animals can, and do destroy crops on which humans rely to feed themselves, a fact that has received little recognition in the writings of animal ethicists. In order to have sufficient plant foods, it is therefore sometimes necessary to kill the animals who would otherwise feed from the plants grown for human consumption. If a crop is plagued by locusts, for example, and if their presence would pose a significant threat to human food security, I think it would be acceptable to use pesticides to kill them. Deer also destroy human crops, yet they are widely held to have greater moral significance compared to locusts. While I shall not engage with this view here, I shall discuss alternative methods to control their numbers below. Another difficult issue is the question if non-lethal traps should be preferred to trap rodents, as the claim has been made that confining and relocating rodents following trapping "is probably extremely stressful" (Meerburg et al. 2008, p. 1209).

While the issue of when the killing of animals might be justifiable merits more space for discussion than I have here, three further examples are provided to stimulate reflection. Firstly, while we take control of the lives of animals when we help them out of their misery, I believe nevertheless that such so-called "mercy killings" can be justified. What motivates those who kill animals in such situations is not to appropriate the bodies of animals to satisfy the human interest in eating animals, yet to spare the animals from further suffering. Since it has been argued that nonhuman animals cannot place their suffering in a wider context of meaning, cannot gain comfort from the thought that it will soon be over, and may not be able to value a continued existence, I believe there may be situations where it is appropriate to relieve an animal from its misery (Aitken 2008).

 $^{^{19}}$ A similar view has been adopted by Telfer (2004, p. 61): "If death is an ill for animals, we cannot justify causing it merely on the ground that the animal will suffer this ill one day anyway"

A second category of situations are instances when the lives of some animals pose a threat to other nonhuman animals or plants. Michael Hutchins (2008), for example, has claimed that, in some situations, conservation values (such as the local or global preservation of species) might be served best by the killing of some animals. A case in point might be the deer population (to be precise: the populations of a range of deer) in Great Britain, which has been estimated to number somewhere between one and a half and two million individuals. It is thought that numbers have not been higher for more than a millennium. About 350.000 deer have been culled annually in recent years, yet because of land management and climatic changes it has been argued that more deer should be culled to keep this number at a similar level. Without such culling, the argument has been made that conservation values would be jeopardized as deer can cause destruction to a range of habitats (Lester 2008). In such cases, difficult choices must be made, as conservation values must be balanced with the values served by preserving the lives of deer.

While I question the ethics of culling deer to satisfy the value of (some conception of) nature conservation, my third example relates to the fact that collisions between deer and motorized vehicles occur regularly. These collisions claim not only the lives of deer, but also human lives. If we assume that there is a case for people continuing to use some form or other of motorized transport and that no technologies could be used to eliminate dangerous collisions altogether, we must face up to the question of whether deer culling should be carried out to save people's lives. While it is beyond the scope of this paper to discuss this issue in detail, alternative methods to control their numbers, such as reintroducing wolves or lynx, or providing contraceptives, may be possible, yet may not be free from their own moral problems. Sterilization—which Haynes (2008b, p. 474) has suggested might be the most humane method-should also be considered, yet might not provide the ideal solution in all situations as it does not reduce populations with immediate effect and-like contraception-may be difficult to administer. While these examples raise complex moral issues, I hope to have made the point that killing animals is justifiable in some situations.

Why Refrain from Eating Those Who Are Killed Justifiably?

Could it be said that vegetarians are sentimental for not wanting to eat the bodies of animals who are killed justifiably, or those who suffer natural or accidental deaths? To refrain from consuming the bodies of these animals seems to be wasteful. Diamond (2004, p. 99), for example, has claimed that those who base their vegetarian stance exclusively on the intentional killing of animals for food "should be perfectly happy to eat the unfortunate lamb that has just been hit by a car". Nevertheless, some vegetarians might be unhappy to eat any animal bodies, irrespective of whether or not the animals had been reared in order to be killed for human consumption. Are their feelings misplaced? Some might say that not eating the bodies from animals who had not been killed in order to provide food is immoral because of its wastefulness. Others might say that it is not much different from deciding not to eat humans after they die from accidents or natural causes. I belong

to the latter group. If it can be morally tolerated to abstain from eating human meat in spite of its wastefulness, it should also be morally appropriate to abstain from eating the bodies of nonhuman animals.

Should we therefore—at least provided that sufficient and adequate plant foods are available without the production of unacceptable ecological or social costs abide by a moral obligation to abstain from eating animal bodies altogether, irrespective of where they come from? Many people appear to believe that, at least under normal circumstances, we do have such an obligation to abstain as far as the question of whether or not to eat human meat is concerned. While it is not easy to explain why this should be so, I believe this obligation may be generated from the experience of a clash between our natural enjoyment of food and our obligation to respect people. In other words, the duty not to eat human beings is founded on the recognition that our potential enjoyment of human meat could be such that it might increase the temptation to turn living people into dead meat. Even people who do not refrain from eating the bodies of some animals might justify their feeling that it would be wrong to eat animals who are perceived to be pets in a similar manner. If the making of such a connection makes sense, the establishment of a moral duty not to eat any nonhuman animals who had been killed accidentally, naturally, or mercifully would act as an additional safeguard to prevent living animals from being killed for food.

Why Vegetarianism Might Be Problematic

So, perhaps adopting a vegetarian diet is not so sentimental after all, at least where it does not rely on the importation of foods that have been grown far away. Or is it? Many vegetarians are quite happy to eat animal products that do not include meat, particularly dairy products. This could be questioned for at least two reasons. Firstly, many of the relatively high health and environmental costs associated with omnivorous diets also apply to vegetarian diets, especially when they include relatively large proportions of dairy products (Garnett 2008, p. 64). Secondly, vegetarian diets are not immune from the moral problems related to the infliction of unnecessary pain on animals and the killing of animals for food. Many food products consumed by vegetarians are produced by animals who are not always treated in ways that are agreeable and who are killed for food once their productive lives are over. Additionally, the production of dairy products as it happens today is frequently associated with the creation of male chicks and calves who are either killed at birth or killed early on in their lives. Opting for a vegetarian diet without eliminating dairy products out of disapproval of the killing of animals for food could therefore be likened with disagreeing with child labor, while accepting the products that children produce at the same time.

One exception is some Hare Krishna communities, where the animals who provide dairy products are allowed to live a natural lifespan after their productive lives are over (Rosen 2004). In principle, these Hare Krishna methods could be adopted by other vegetarians, yet the sheer fact that farm animals would be allowed to live out their natural lives would be associated with significant, and I believe

unacceptable, environmental costs, at least in many ecosystems.²⁰ In addition, these methods still control aspects of animals' lives, and may inflict pain on them. On this basis, I believe that those vegetarians who adopt vegetarianism because of their feeling that it is wrong to kill animals for food (in certain circumstances) or to treat animals in questionable ways could be considered to be sentimental when they continue consuming products from dairy industries of which they know that they practice the killing of animals or treat them in ways they find objectionable. While I refrain from claiming to know that they are sentimental (as I do not know with certainty that those who do not feel inclined to value consistency are wrong), I believe that they are. The motives that underlie their dietary choices do not appear to be consistent. Apart from lacking in consistency, I believe that their position lacks moral sense as they give insufficient moral consideration to the human and nonhuman lives that are affected by their dietary choices. However, since I mentioned before that the word "sentimental" has often been associated with the adoption of moral absolutism, a position that I reject, I prefer to say that I think that their choices are unethical. I do not wish to contribute to what Adams has called the "muting of ... voices" of those who disagree with me on this (1990, p. 76). Rather, I hope that this paper has challenged the view that vegetarians are sentimental in all situations 21

Conclusion

I have engaged with the widely held view that the adoption of a vegetarian diet is sentimental. I have argued that the charge of sentimentalism is most commonly, yet not exclusively, brought by those who adopt moral absolutism, a meta-ethical position that I reject. I have discussed three concerns that might motivate those who adopt vegetarian diets: a concern with the human health costs associated with alternative diets, a concern with the infliction of unnecessary suffering on animals, and a concern with their being killed for food. I have argued that these are valid moral concerns, and that at least some vegetarian diets therefore appear to make sense. While I have argued that vegetarianism does not make sense in some situations, I hope that this paper has shown that a blanket characterization of vegetarianism as sentimental or faddish may not be appropriate. This conclusion stands unless it could be argued that I have overlooked important moral concerns

²⁰ As mentioned before, farm animals require significant amounts of resources, including land and water. I take the view that many of these resources should be used to grow plant foods and other resources (for example, wood) to provide for the needs of our rapidly expanding human population. Should these Hare Krishna methods be adopted widely, this would result in great increases in land and water use and pollution, and in the emissions of greenhouse and other polluting gases.

²¹ It goes without saying that not all vegan diets are healthy, yet I embrace the view, adopted by the American Dietetic Association and Dietitians of Canada (2003, p. 748), that "well-planned" vegan diets are healthy. Should this view not survive critical scrutiny, it could then be concluded that the feelings that motivate the adoption of vegan diets would be sentimental. While I do not have the scope to debate the health benefits or otherwise of vegan diets, for a discussion see, for example, the collection of articles introduced by Comstock (1994) in this journal.

that are ignored by vegans who are able to meet their dietary needs without the need to import food that was grown far away.

In developing my conclusion, I have focused primarily on the question if a moral distinction between the killing of plants and the killing of animals should be made. I have argued that neither Peter Singer nor Tom Regan, two of the most prominent writers on animal ethics, have answered this question satisfactorily, and I have given an affirmative answer to this question. Inspired by Alfred Whitehead, I have also challenged the view—widely held in the literature on animal ethics—that relatively simple animals such as molluscs as well as plants have no awareness in them. While noting that many people may share my feelings about the killing of animals, I have also argued that many suppress such feelings, perhaps by labeling them as sentimental, and I have tried to shed some light on why some might do so.

Finally, I have argued that even those who adopt vegan diets may require the intentional killing of animals in some situations, a fact that has received little attention in the animal ethics literature. By exploring the feelings of those who choose vegetarian diets, I hope that this paper has shown that there are many good reasons why the adoption of vegan diets might be appropriate in some situations.

Acknowledgments This paper contains data from the "Deliberating the Environment" project, funded by the "Science in Society" program of the Economics and Social Research Council (grant number: RES 151250014). I also thank the anonymous reviewers who stimulated reflection by commenting on a previous version of this paper, and those who invited me to present and commented on earlier versions by participating in meetings organised by the North Shields Probus Club, Café Culture at Newcastle, the Newcastle Ethics, Legal, and Political Philosophy Group, and VegNE.

References

- Adams, C. (1990). The sexual politics of meat. A feminist-vegetarian critical theory. New York: Continuum.
- Aitken, G. (2008). Animal suffering: An evolutionary approach. Environmental Values, 17(2), 165-180.
- American Dietetic Association and Dietitians of Canada. (2003). Position of the American Dietetic Association and dietitians of Canada: Vegetarian diets. *Journal of the American Dietetic* Association, 103(6), 748–765.
- Balaban, P., & Maksimova, O. (1993). Positive and negative brain zones in the snail. European Journal of Neuroscience, 5, 768–774.
- Bell, D., Thompson, N., Deckers, J., Brennan, M., & Gray, T. (2005). Deliberating the environment. Newcastle: Centre for Rural Economy at Newcastle University.
- Bellarby, J., Foereid, B., Hastings, A., Smith, P. (2008). Cool farming: Climate impacts of agriculture and mitigation potential. Report produced by the University of Aberdeen for Greenpeace: Greenpeace.
- Bentham, J. (1907). An introduction to the principles of morals and legislation. Reprint of 1823 edition. Oxford: Clarendon Press.
- Birch, C., & Cobb, J., Jr. (1984). The liberation of life. From the cell to the community (2nd ed.). Cambridge: Cambridge University Press.
- Broom, D. (2007). Cognitive ability and sentience. Which aquatic animals should be protected? *Diseases of Aquatic Organisms*, 75(9), 9–108.
- Campbell, T., & Campbell, T., I. I. (2006). *The China study. Startling implications for diet, weight loss, and long-term health.* Dallas: BenBella Books.
- Cobb, J., Jr. (1978). Beyond anthropocentrism in ethics and religion. In R. Knowles Morris & M. Fox (Eds.), On the fifth day. Animal rights and human ethics (pp. 137–153). Washington, DC: Acropolis Books.

- Compassion in World Farming. (2007). *Global warning: Climate change and farm animal welfare*. Godalming: Compassion in World Farming.
- Comstock, G. (1994). Might morality require veganism? Introduction. Journal of Agricultural and Environmental Ethics, 7, 3–6.
- D'Arms, J., & Jacobson, D. (2000). Sentiment and value. Ethics, 110, 722-748.
- Deckers, J. (2007). Are those who subscribe to the view that early embryos are persons irrational and inconsistent? A reply to Brock. *Journal of Medical Ethics*, 33, 102–106.
- Diamond, C. (2004). Eating meat and eating people. In C. Sunstein & M. Nussbaum (Eds.), Animal rights. Current debates and new directions (pp. 93–107). Oxford: Oxford University Press.
- Dombrowski, D. (2006). Is the argument from marginal cases obtuse? *Journal of Applied Philosophy*, 23, 223–232.
- Engster, D. (2006). Care ethics and animal welfare. Journal of Social Philosophy, 37(4), 521-536.
- Federal Ethics Committee on Non-human Biotechnology (ECNH). (2008). The dignity of living beings with regard to plants. Berne: ECNH Secretariat.
- Food and Agriculture Organization of the United Nations (FAO). (2008). FAO statistical database. Retrieved December 2008, from http://faostat.fao.org.
- Fox, M. (1978). 'Animal liberation': A critique. Ethics, 88(2), 106-118.
- Fox, W. (2006). A theory of general ethics. Human relationships, nature, and the built environment. Cambridge: MIT Press.
- Gamlund, E. (2006). The moral basis of vegetarianism. In M. Kaiser & M. Lien (Eds.), *Ethics and the politics of food* (pp. 123–127). Wageningen: Wageningen Academic Publishers.
- Gamlund, E. (2007). Who has moral status in the environment? A spinozistic answer. *The Trumpeter*, 23(1), 3–27.
- Garnett, T. (2007). Meat and dairy production and consumption: Exploring the livestock sector's contribution to the UK's greenhouse gas emissions and assessing what less greenhouse gas intensive systems of production and consumption might look like. University of Surrey: Centre for Environmental Strategy.
- Garnett, T. (2008). Cooking up a storm. Food, greenhouse gas emissions and our changing climate. University of Surrey: Centre for Environmental Strategy.
- Garrett, J. (2007). Utilitarianism, vegetarianism, and human health: A response to the causal impotence objection. *Journal of Applied Philosophy*, 24, 223–237.
- Ginter, E. (2008). Vegetarian diets, chronic diseases and longevity. *Bratislavske Lekarske Listy*, 109, 463–466.
- Greger, M. (2006). Bird flu: A virus of our own hatching. New York: Lantern Books.
- Griffin, D. (1998). Unsnarling the world-knot. Consciousness, freedom, and the mind-body problem. Berkeley: University of California Press.
- Hawkins, J., & Allen, R. (Eds.). (1991). Oxford encyclopedic English dictionary. Oxford: Clarendon Press.
- Haynes, R. (2008a). Animal welfare. Competing conceptions and their implications. New York: Springer.
- Haynes, R. (2008b). Book review of Marti Kheel, Nature Ethics. An ecofeminist perspective (Lanham: Rowman and Littlefield, 2008). *Journal of Agricultural and Environmental Ethics*, 21, 469–475.
- Hume, D. (1978). In L. A. Selby-Bigge (Ed.), A treatise of human nature (2nd ed.). Oxford: Clarendon Press.
- Hutchins, M. (2008). Animal rights and conservation. Conservation Biology, 22(4), 815-817.
- Ilea, R. (2009). Intensive livestock farming: Global trends, increased environmental concerns, and ethical solutions. *Journal of Agricultural and Environmental Ethics*, 22, 153–167.
- Intergovernmental Panel on Climate Change (IPCC). (2001). Climate change 2001: Mitigation of climate change. Technical Summary. A Report of Working Group III. Intergovernmental Panel on Climate Change.
- Intergovernmental Panel on Climate Change (IPCC). (2007). Climate change 2007: Mitigation. Contribution of working group III to the Fourth Assessment Report of the Intergovernmental Panel on climate change. Cambridge: Cambridge University Press.
- Jennings, H. (1906). Behavior of the lower organisms. New York: Columbia University Press.
- Kaldewaij, F. (2006). Animals and the harm of death. In M. Kaiser & M. Lien (Eds.), *Ethics and the politics of food* (pp. 528–532). Wageningen: Wageningen Academic Publishers.
- Kerasote, T. (2005). The ethics of hunting. Forum discussion. Frontiers in Ecology and the Environment, 3, 396–397.
- Kheel, M. (2008). Nature ethics. An ecofeminist Perspective. Lanham: Rowman and Littlefield.

- Krasne, F., & Glanzman, D. (1995). What we can learn from invertebrate learning. Annual Review of Psychology, 46, 585–624.
- Lamey, A. (2007). Food fight! Davis versus Regan on the ethics of eating beef. *Journal of Social Philosophy*, 38(2), 331–348.
- Lester, P. (2008). Deer: Menace or mismanagement. *Country Life*, 4 December. Retrieved February 2009, from http://www.countrylife.co.uk.
- Matheny, G. (2003). Least harm: A defense of vegetarianism from Steven Davis's omnivorous proposal. Journal of Agricultural and Environmental Ethics, 16, 505–511.
- McDaniel, J. (1989). Of god and pelicans. A theology of reverence for life. Louisville: Westminster/John Knox Press.
- Meerburg, B., Brom, F., & Kijlstra, A. (2008). The ethics of rodent control. *Pest Management Science*, 64, 1205–1211.
- Messina, V., & Burke, K. (1997). Position of the American Dietetic Association: Vegetarian diets. Journal of the American Dietetic Association, 97(11), 1317–1321.
- Moltschaniwskyj, N., Hall, K., Lipinski, M., Marian, J., Nishiguchi, M., Sakai, M., et al. (2007). Ethical and welfare considerations when using cephalopods as experimental animals. *Reviews in Fish Biology and Fisheries*, 17, 455–476.
- Morpurgo, M. (2004). Private peaceful. London: Harper Collins.
- Regan, T. (1983). The case for animal rights. Berkeley: University of California Press.
- Regan, T. (1997). The rights of humans and other animals. Ethics and Behavior, 7, 103-111.
- Regan, T. (2004). The case for animal rights (2nd ed.). Berkeley: University of California Press.
- Rosen, S. (2004). *Holy cow. The Hare Krishna contribution to vegetarianism and animal rights.* Herndon: Lantern Books.
- Saigusa, T., Tero, A., Nakagaki, T., & Kuramoto, Y. (2008). Amoebae anticipate periodic events. *Physical Review Letters*, 100(1), 1–4.
- Salt, H. (1900). The rights of animals. International Journal of Ethics, 10(2), 206-222.
- Sherwin, C. (2001). Can invertebrates suffer? Or, how robust is the argument-by-analogy? *Animal Welfare*, 10, S103–S118.
- Singer, P. (1976). Animal liberation. London: Jonathan Cape.
- Singer, P. (1978). The fable of the fox and the unliberated animals. Ethics, 88(2), 119-125.
- Singer, P. (1990). Animal liberation (2nd ed.). London: Jonathan Cape.
- Slote, M. (2003). Sentimentalist virtue and moral judgement: Outline of a project. *Metaphilosophy*, 34(1/ 2), 131–143.
- Smil, V. (2000). Feeding the world: A challenge for the twenty-first century. Cambridge: MIT Press.
- Stefano, G., Hall, B., Makman, M., & Dvorkin, B. (1981). Opioid inhibition of dopamine release from nervous tissue of *Mytilus edulis* and *Octopus bimaculatus*. *Science*, 213(August), 928–930.
- Stefano, G., Salzet, B., & Fricchione, G. (1998). Enkelytin and opioid peptide association in invertebrates and vertebrates: Immune activation and pain. *Immunology Today*, 19, 265–268.
- Steinfeld, H., Gerber, P., Wassenaar, T., Castel, V., Rosales, M., & de Haan, C. (2006). Livestock's long shadow. Environmental issues and options. Rome: Food and Agriculture Organization of the United Nations.
- Step, E. (2008). Shell life. An introduction to the British Mollusca. Whitefish: Kessinger Publishing.
- Taylor, P. (1986). *Respect for nature. A theory of environmental ethics*. Princeton: Princeton University Press.
- Telfer, E. (2004). 'Animals do it too!' The Franklin defence of meat-eating. *Journal of Moral Philosophy*, *1*, 51–67.
- United Nations Environment Program (UNEP). (2002). Protecting the Environment from Land Degradation. UNEP's Action in the Framework of the Global Environment Facility.
- Varner, G. (1999). How facts matter—on the language condition and the scope of pain in the animal kingdom. *Pain Forum*, 8, 84–86.
- Warren, M. (2000). Moral status. Obligations to persons and other living things. Oxford: Oxford University Press.
- Weiss, P. (1980). Recollections of Alfred North Whitehead. Process Studies, 10, 44-56.
- Whitehead, A. (1978). Process and reality. An essay in cosmology. (corrected edition by David Griffin and Donald Sherburne). New York: The Free Press.
- Wildschutte, H., & Lawrence, J. (2007). Differential Salmonella survival against communities of intestinal amoebae. *Microbiology*, 153, 1781–1789.

- Woolhouse, M., & Gowtage-Sequeria, S. (2005). Host range and emerging and reemerging pathogens. *Emerging Infectious Diseases*, 11, 1842–1847.
- World Bank. (2007). World development report 2008: Agriculture for development. Washington, DC: World Bank.
- World Cancer Research Fund & American Institute for Cancer Research. (2007). Food, nutrition, physical activity, and the prevention of cancer: A global perspective. Washington, DC: American Institute for Cancer Research.
- World Health Organization. (2003). Diet, Nutrition, and the Prevention of Chronic Diseases. (WHO Technical Report Series No. 916). Geneva: World Health Organization.