WHY PEOPLE LOVE ANIMALS YET CONTINUE TO EAT THEM

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Abstract

We, as humans, are deeply fascinated by animals from an early age yet we also in many ways exploit animals. Eating animals is a particular "blind spot" in our ethical thinking about animals. Recent work in psychology illuminates why it is so difficult to think straight ethically about our use of animals as food. We are often mindless when we eat; rarely do we connect animal products with their animal origins. When we eat animals, we are motivated to disregard information we would otherwise find relevant to our ethical concerns. We think we have good reasons for eating animals, which overrides our empathy for their suffering. This chapter reviews the psychological literature on our biased thinking about animals we eat and concludes with some thoughts on what might be done about it.

Biases in our thinking about animals

Our relationships with animals are riddled with contradictions and prejudice. From a young age, we are fascinated with animals. Research shows that children as young as one year of age naturally gravitate towards animals. When given the choice of playing with a wide range of attractive toys, from dolls to toy airplanes, and living animals, one- and two-year-olds decidedly prefer to interact with a fish or hamster (LoBue, Pickard, Sherman, Axford, & DeLoache, 2013). Children are even interested in animals that for many adults would be potentially threatening – spiders, snakes; they enjoy watching and talking about these animals even if their parents do not. Indeed, adolescent children seem to know more about the lives of certain animals (e.g., invertebrate) than most adults do (Kellert, 1985).

Yet, also from an early age, we can observe the seeds of our prejudice in the way we think about animals. Children feel a greater emotional attachment for animals

they have as pets than animals farmed and raised for food (Daly & Morton, 2006); children attribute greater intelligence and sentience, for example, to dogs than cows (Hawkins & Williams, 2016). The use of animals for food does not seem to bother most children, especially those who grow up in rural areas and are accustomed to connecting animals to food products (Bray, Zambrano, Chur-Hansen, & Ankeny, 2016). Children's concern for animals, like adults, is anthropocentric, that is, we use our own experiences in our efforts to understand and relate to animals, and we give preference to those animals we believe are most like us (Plous, 1993; Serpell, 2004). We, as humans, like to think of ourselves as special and superior in many ways to animals, and research by Leite, Dhont, and Hodson (2019) shows the more we endorse our superiority to animals, the less we believe we need to care for or show concern for them.

A study by Borgi and Cirulli (2015) presented kindergarten children with 48 different animal species. The animals were presented in pairs, and the children were asked which of the two they liked more. The results were largely consistent with those observed in adults (e.g., Tisdell, Wilson, & Nantha, 2006) – the children exhibited a preference for animals phylogenetically similar to humans. Mammals were preferred to birds, which were preferred to herptiles (e.g., lizards, frogs) and invertebrates (e.g., insects, worms). There were a few exceptions – butterflies were liked quite a lot due to their aesthetic qualities, and snails and frogs got the same amount of "likes" as monkeys – but by and large children exhibited preferences for animals that they believed to be similar to them. Furthermore, mammals commonly used as food (e.g., cows, pigs, sheep) fared much lower in children's regard compared to their non-farmed counterparts (e.g., elephants, dolphins, kangaroos).

As we enter adulthood, our prejudiced thinking about animals only solidifies further. Our decisions about which animals should be protected and conserved are guided not by which animals are most vulnerable or in the greatest need of our help, but by our emotional preferences – which animals we like and that are most popular (Colléony, Clayton, Couvet, Jalme, & Prévot, 2017; Tisdell et al., 2006). We become comfortable with the fact that we offer legal protections and moral status to some animals (e.g., dogs), while denying the same protections to other species (e.g., pigs) with little concern for their comparable capacity for thought and emotion (Bilewicz, Imhoff, & Drogosz, 2011; Joy, 2010). When we see animals caged and in distress our bodies react most strongly (e.g., we sweat more in empathic concern) when the animal is phylogenetically similar to us; for example, the suffering of a monkey elicits a stronger empathic response than the suffering of a chicken (Westbury & Neumann, 2008). We afford less standing and concern to animals that appear threatening and dangerous (Piazza, Landy, & Goodwin, 2014), and give greater standing to animals that are cute and evoke positive emotions (Piazza, McLatchie, & Olesen, 2018). Indeed, research shows that cute dogs, with babylike features, tend to be preferred as pets (Weiss, Miller, Mohan-Gibbons, & Vela, 2012) and are treated more humanely by their owners (Thorn, Howell, Brown, & Bennett, 2015). Likewise, when meat is known to be sourced from a baby animal it

is found less appetizing than the very same meat sourced from a mature animal of the same species (Piazza et al., 2018).

Eating animals

Of all the ways we use and exploit animals, probably nowhere else are human biases on such conspicuous display as in the domain of food. When we think of an animal as a food source our moral attitudes about them drastically shift (Loughnan, Bastian, & Haslam, 2014; Piazza & Loughnan, 2016). This is true when thinking about different animal species - i.e., those we use for food and those we do not (Herzog, 2010; Joy, 2010) - but also when thinking about the same animal differently. In one study, participants read a story about the Bennett's Tree Kangaroo living in Papua New Guinea (Bratanova, Loughnan, & Bastian, 2011). Some participants learned some interesting biological facts about the animal, while other participants learned these facts and they also read that a group of people indigenous to Papua New Guinea hunt the tree kangaroo for meat. Others learned that the indigenous people simply collected dead kangaroos who had been knocked out of trees in a violent storm to use for meat. Regardless of whether the indigenous group was responsible for the tree kangaroos' death, when participants were thinking about the kangaroo as meat to be eaten they attributed less suffering to the kangaroos and less moral concern for them than when they were simply thinking of the kangaroos as animals.

Something appears to happen to our moral concern for animals when we stop thinking about them as living beings and start thinking of them as food. In ongoing research from my lab (Piazza, Gardiner, & Stones, unpublished), we manipulated people's perceptions of whether an exotic culture from South America had a traditional meal that revolved around meat from a particular animal - tapirs in one study, and wild boars in another. Participants read basic facts about the animal and either learned that the exotic culture had a tradition of using meat from the animal in their cooking, or they learned that the traditional meal did not include meat from the animal, however, a member of the group proposed to incorporate meat from the animal into the meal. Participants judged the acceptability of killing the tapir or wild boar to use as food. In both studies, we observed that our British participants (a total of 173 across studies) found it more acceptable for the foreign people to kill and eat the animal when there already existed a tradition around eating the animal than when it was newly proposed – as if the tradition was reason enough to accept the use of the animal. This was true despite not eating the animal themselves, and independent of other characteristics of the animal, including how harmless or young was the animal.

Thus, thinking about animals as food appears to alter our moral judgments of animals, and this seems to be particularly true when there is a history of animal use or a social consensus about its acceptability. When culture or tradition dictates certain animals have a particular use, it can be difficult to think critically about our treatment of that animal.

Animals and food: An ethical blind spot

There are many reasons why people have trouble thinking consistently about animals. But probably the biggest reason is the same reason why people find themselves often behaving morally inconsistent in other domains of life: we have ethical blind spots (Bazerman & Tenbrunsel, 2011; Sezer, Gino, & Bazerman, 2015). That is, we often fail to realize our actions have ethical implications or should be framed in moral terms. This is essentially the problem facing us in the realm of animals and food. Most people simply fail to see eating animals as a moral issue, or if they have some doubts about its ethicality, they easily convince themselves they have good reasons for doing it (Piazza, Ruby, Loughnan, et al., 2015). This is not to say we do not face similar challenges in other domains of animal use: animal testing, entertainment, population management, and so on (see Knight, Vrij, Cherryman, & Nunkoosing, 2004). However, the social consensus about using animals for food is overwhelmingly affirmative, thus, the ethical blind spot with regards to eating animals is incredibly pervasive.

Because eating animals is socially normative in most places and circles, people rarely find themselves in a compelling environment that forces them to question its ethicality. Thus, the solutions that moral psychologists commonly prescribe for counteracting ethical blind spots do not easily apply. One popular psychological perspective on why people fail to act morally claims that people fail not because they lack the motivation to be moral, but because they are situationally inattentive to their internal standards when facing a temptation (Mazar, Amir, & Ariely, 2008). Reminding people of their standards, making these standards more visible within the decision-making context, and engaging people's moral self-concepts prior to acting have been recommended as three ways for overcoming moral temptations (Ayal, Gino, Barkan, & Ariely, 2015). This advice, as helpful as it is, can only be applied when people are willing to see an action in moral terms. Reminding people of their motivation to be good or drawing their attention to the questionable aspects of eating animals will have little effect if people continue to see themselves on the right (or popular) side of the issue. Indeed, when people believe it is their right to use animals as food they respond only with reactance and hostility (e.g., attacking the motivations of vegetarians) when they believe this right is under threat (Dhont & Hodson, 2014). It seems obvious, but the principal challenge in convincing people that using animals for food is morally problematic is its widespread acceptance.

Mindless eating: Dissociating meat from animal

When a behavior is socially normative and widespread, routines often form around that behavior, leading to yet another roadblock to social change: mindless behavior. *Mindlessness* is the automatization of behavior, such that one does not have to think about what one is doing. One merely enacts pre-set scripts, routines or procedures that have been used successfully in the past (Neal, Wood, & Quinn, 2006). In the

context of food, this means thoughtlessly purchasing and eating foods that one has always eaten or is already comfortable with. Mindlessness about food can be problematic because it prevents us from carefully considering the ethicality of the choices we make (see Bastian & Loughnan, 2017).

Interrupting routines can be useful in correcting unethical behavior (Sezer et al., 2015). When people are given more time to reflect on their decisions they are often able to overcome biases in their thinking. For example, reductions in genderbased prejudice have been observed when people are asked to carefully consider job candidates on the basis of their qualifications and not their gender (Bohnet, Van Geen, & Bazerman, 2015). Eating meat is normative and routine for many people, and the mindlessness of this behavior manifests in the dissociation of meat from its animal source (Joy, 2010). Dissociation enables people to mindlessly order and devour a cheeseburger without any thought of the animals that suffered to produce it.

Kunst and Hohle (2016) demonstrated in a series of studies how dissociation is often the default for meat eaters. When cooking meat or selecting a meat dish, little thought is given to the animal source. Yet when efforts are made to draw people's attention to the animal it came from, people's appetite for meat declines. For example, in one study, the researchers compared participants' judgments of chicken presented as either: a whole body without its head, cut into parts (legs, wings, and breast), or minced into a meat purée. They found that meat eaters were more likely to think about the animal source when the whole body of the animal was presented in the meat dish than when the meat was presented to look less like an animal. Reminding meat eaters of the animal origins had the consequence of increasing participants' empathy towards the animal, and decreasing their appetite for the meat product.

One conclusion you might draw from this research is that drawing people's attention to the living animal origins of their meat might be sufficient to overcome the psychological barrier posed by mindless eating. If only things were that simple. Although research suggests that connecting people's thoughts about meat and its animal source can make meat less appetizing, meat eaters are still motivated to buck the animal welfare implications of this connection, either because it presents a challenge to their moral self-concept or they simply prefer to believe in the correctness of what they are doing.

The meat-motivated mind

Mindless dissociation can keep us from thinking about the moral implications of what we eat. Yet, when the thought arises that eating meat may not be fully ethical, there are other psychological strategies available to help us rebuff these irksome thoughts. Indeed, such thoughts may be increasingly common in today's society. The horrors of factory farming have been tirelessly documented and exposed by animal advocates, such that the public is becoming more and more aware of the ethical controversy surrounding meat production, particularly in the West. Though

vegetarians and vegans remain minorities in every country (Ruby, 2012), and face criticism for taking such an unpopular stance towards meat (MacInnis & Hodson, 2017), their presence in society makes it increasingly difficult for people to remain entirely guileless about their meat consumption (throw in concerns about health and the environment and the potential for a guilty conscience intensifies further). At the same time, animal products, and meat in particular, are a source of great pleasure for many people (Zaraska, 2016). The pleasure of cooked meat remains a fundamental barrier to reductions in consumption (Lea & Worsley, 2003), and, indeed, a barrier to our moral thinking about animals as well (Bastian & Loughnan, 2017; Piazza & Loughnan, 2016; Piazza et al., 2015).

Research in psychology has shown that when people desire something to be true, we are quite adept at fitting our beliefs to support our preferences (Baron, 1995; Kunda, 1990). This seems to be true even when we are confronted with information that might suggest our beliefs may be incorrect and need to be updated. As a general rule, consumers will go out of their way to avoid exposing themselves to information that could interfere with their purchasing choices (Ehrich & Irwin, 2005). But when such information cannot be avoided, rather than accommodating our beliefs to fit this new information we often disregard it, particularly when the information has implications for cherished practices or beliefs that we hold about the world or ourselves (Piazza & Loughnan, 2016).

Denial and disregard: Actively avoiding the ethical implications of meat

To accept that meat comes from a once living, feeling, thinking being is ethically disorienting for many people (Loughnan et al., 2014). Believing that one is in some way responsible for the injury and death of innocent animals is a distressing thought. How do most consumers who have such thoughts deal with them?

One strategy seems to be to convince oneself that animals are not really harmed or mistreated when they are processed for food (Bastian, Loughnan, Haslam, & Radke, 2012; Rothgerber, 2012). In one study, my colleagues and I had meat eaters from the United States tell us why it is okay to eat meat (Piazza et al., 2015). One line of argumentation that was quite common was to contend that animals killed for meat are treated and slaughtered humanely, or that the participant made efforts to purchase exclusively "humane" meat products. In a similar line of research, Dowsett, Semmler, Bray, Ankeny, and Chur-Hensen (2018) found that roughly 7 percent of Australians in their sample asserted that they only ate humane or freerange animal products. Setting aside whether there is such thing as "humane meat" (see McWilliams, 2015), the *belief* in humane meat appears to be quite a useful psychological strategy for neutralizing the ethical dissonance one might otherwise experience when considering the production of meat.

Another vehicle for avoiding ethical implications of meat is to deny that animals used for food are capable of suffering in any meaningful way. Loughnan, Haslam, and Bastian (2010) found that animals used for food are often denied the same

cognitive and emotional capabilities as animals exempt from such treatment. Simply considering an animal (e.g., cow or sheep) as food, or in the process of becoming food (e.g., being transported to the slaughterhouse), is enough to motivate meat eaters to reduce their opinion about the mental capabilities of an animal (Bastian et al., 2012). This denial of mind is argued to reduce the perceived unethicality of meat consumption by removing the perceived harm done to animals.

Even more challenging to address is the tactic of acknowledging, yet disregarding, information that could bear on one's moral thinking. Steve Loughnan and I recently found that people often fail to utilize relevant information about animals in their moral thinking when the animal poses an ethical dilemma for them (Piazza & Loughnan, 2016). This seems to be true even when relevant information is made readily available to consumers. In one study, omnivores read about the intellectual capabilities of one of three animals: pigs (animals eaten in their society), tapirs (animals not eaten in their society), and trablans (a fictional animal). Participants either learned that the animal was quite smart and could outperform dogs on certain problem-solving tasks, or they learned that the animal was not so smart and that dogs outperformed them. All participants further read about how the animal was currently being confined, mistreated and slaughtered for meat: pigs in North America and Europe, tapirs in South America and Asia, and trablans on a fictional planet. They then made a moral judgment about the treatment of the animal. A distinct, but unsurprising, pattern of results emerged: when the animal was described as highly intelligent, participants found it morally worse to treat them in the manner described. However, this was only true for tapirs and trablans. Pigs were the clear exception.

The most surprising finding was not that pigs were treated morally different from the other animals – we expected this to be the case given the normative use of pigs as food in many cultures. The most surprising finding was that all three animals were rated equally intelligent by our omnivorous participants when such information was made available to them. In other words, our participants acknowledged the great intelligence of pigs, yet this information made no impact whatsoever upon their moral judgment. It was as though the information no longer mattered, while this was not the case when they were judging the moral worth of the other animals that were not being used for food in their own culture.

In short, it was only when the animal source had direct implications for the participants themselves that they disregarded intelligence information as morally relevant input into their judgment of how the animal should be treated. This study highlights probably the most exasperating psychological maneuver adopted by meat eaters: when problematic information cannot be reframed or contested, one can simply disregard the information or treat it as irrelevant.

Rationalizing: Thinking we have good reasons

Because eating meat is practiced in just about every country and community on the planet, it is generally assumed that we have good reasons for doing it (Joy, 2010; Piazza et al., 2015). This is often how our moral reasoning works – rather than arriving at conclusions through careful analysis of the facts, we often have a conclusion in mind that we would prefer and we search for facts and arguments that support it (Haidt, 2001; Nickerson, 1998). Indeed, when we think we have the right position we tend to believe most of the facts, or at least the most *legitimate* facts, are on our side – what psychologists call "my-side bias" (Baron, 1995; Liu & Ditto, 2013). This is another way in which our thinking about the use of animals for food can be difficult to overturn. Because meat eating is so pervasive people assume there are good reasons for it, otherwise this would mean billions of people – including our caring and sensible family members, friends, and neighbors – have it wrong.

To probe people's reasons for eating meat, my colleagues and I had American meat eaters tell us "why it is okay to eat meat" (Piazza et al., 2015). Our team was inspired by the writing of psychologist and activist, Melanie Joy, founder of the international organization Beyond Carnism. Joy (2010) theorizes in her book, Why We Love Dogs, Eat Pigs, and Wear Cows: An Introduction to Carnism, that there are three principal arguments people historically have used to justify widespread yet ethically questionable practices, whether it's slavery, gender inequality, or animal use. These justifications entail asserting the normalness of an action (i.e., that it is traditionally or widely practiced); its necessity (i.e., that its undoing would lead to the disruption of health, safety, or human flourishing); and its naturalness (i.e., it arises due to a natural law governing human behavior). Joy termed this set of beliefs the "3Ns of Justification" and speculated about their application to meat consumption.

Inspired by Joy's theorizing, we sought to determine whether the 3Ns of Justification might account for the lion's share of justifications people offer for eating meat. Confirming Joy's view and adding to it, we found that the vast majority of justifications offered fell into four categories: that eating meat is Natural (we are naturally designed to have dominion over animals and to eat meat), Necessary (our bodies need meat to be completely healthy and strong), Normal (most people eat meat and have done so for millennia), and Nice (yum, bacon) – what we labelled "the 4Ns." Based on these responses we developed a 4N Scale for assessing people's endorsement of the 4Ns. What we observed was no surprise: meat eaters endorsed the 4Ns more strongly than meat reducers, who endorsed the 4Ns more strongly than meat avoiders. This is consistent with the notion of "my-side bias" – people's understanding of the *facts* about meat (e.g., whether we need meat to be healthy) depended on their *stance* towards eating meat. But, interestingly, most meat eaters did not fully endorse the 4Ns. On a 1–7 scale, 7 = "completely agree," the average 4N score for meat eaters fell in the 3–5 range (with 4 = "neither agree nor disagree").

These middling mean scores have at least two potential implications. First, they seem to imply that some, possibly many, people continue to eat meat despite lacking strong justifications for doing so. For these people, other forces – such as habit, convenience, coordinating meals with others, or lack of knowledge of meat-free

cuisine - may be the principal barriers to effective dietary change. Second, these neutral endorsements could imply that some meat eaters have ambivalent attitudes towards meat. This provides animal advocates with a potential ray of hope: meat eaters may believe there are good reasons for using animals for food, but their endorsement of these beliefs is not at ceiling - there is plenty of room for doubt. Given the right circumstances, meat eaters might be persuaded otherwise. But what are the right circumstances?

Confronting our rationalizations

We know from research on social influence that people often resist obvious attempts at persuasion, largely because we like to feel that we are autonomous agents, acting of our own accord, and not modelling clay in the hands of others (Fransen, Smit, & Verlegh, 2015). Because meat is a source of great pleasure for many, and the thought of losing something one enjoys is aversive, meat eaters are likely to be on guard for such deliberate persuasion attempts. Less direct approaches to social influence are likely to be more effective in moving people in a more compassionate direction.

One potential strategy that my lab has been recently investigating is selfpersuasion (Aronson, 1999), which entails engaging people in a process whereby they freely generate counterarguments on a perspective or behavior - and the perspective happens to be their own position or a behavior they may perform (for an example of self-persuasion applied to condom use, see Aronson, Fried, & Stone, 1991). Having participants persuasively argue for a position they might otherwise disagree with, or that conflicts with their behavior, creates a state of tension or dissonance that demands resolution (Aronson, 1999; Aronson et al., 1991). One potential solution is to shift one beliefs or practices in the direction of the argued position.

Self-persuasion is a subtle form of persuasion and it might be put to some use on behalf of animals. To test this possibility, in one study, we had 114 British omnivores consider pro-N (i.e., pro-meat) arguments, such as, "It is necessary to eat meat to be strong and healthy" or "Meat is delicious." In one condition, we had them imagine that they were in an argument with a friend and were trying to convince the friend that these pro-N statements were true. In the self-persuasion condition, participants argued the counter-attitudinal or anti-N position, such as, "It is not necessary to eat meat to be strong and healthy" or "Meat is disgusting." After spending 5 or so minutes developing and writing down their arguments, we had them answer a few questions assessing their concern for farmed animals ("pigs, cows, sheep, chickens, etc."), with items such as, "Farmed animals deserve to be treated with care and compassion" and "Farmed animals do not really suffer when being raised and killed for meat" (reverse scored). We also asked them if they would like to take home with them some vegetarian recipes, and we left a stack of recipes by the door for them to take on their way out.



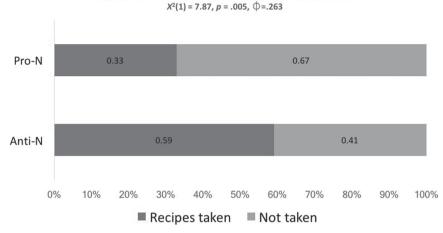


FIGURE 8.1 Percentage of participants taking vs not taking vegetarian recipes home with them after writing Pro-N (pro-meat) or Anti-N (anti-meat) arguments.

The results offered some preliminary positive support for the power of self-persuasion, at least in the short term. Participants who had written counterattitudinal arguments (e.g., why it's *not* necessary to eat meat) reported having greater moral concern for farmed animals (mean scores on a 1–9 scale ranged from 6.35 to 6.62) than those who argued for their own position (mean scores ranged from 5.87 to 5.88). Furthermore, as can be seen in Figure 8.1, participants in the anti-N condition were more likely to take vegetarian recipes home with them afterwards (59%) compared to those in the pro-N condition (33%).

Of course, we cannot know for sure if any of our participants prepared and ate the recipes they brought home with them, and it's certainly far from clear whether self-persuasion could be harnessed to bring about long-term changes in behavior. Although these findings are preliminary, they suggest that one potential way to encourage people to rethink their attitude towards meat is not to try to persuade them out of it, but to give them opportunities to persuade themselves. The trick of course is figuring out natural ways of doing this without being too obvious about the aim of the method itself.

Empathizing with animals that are eaten

As we have seen, there are many psychological processes that serve to reinforce the belief that meat eating is an acceptable practice. In her book, *Why We Love Dogs, Eat Pigs, and Wear Cows*, Melanie Joy (2010) argues that our collective dissociation of meat from animals blinds us to their suffering, which prevents us from acting upon our universal impulses for compassion. The solution to this collective state of dissociation,

she argues, is for more and more people to "bear witness" to the suffering of farmed animals. She writes, "collective witnessing closes the gap in social consciousness. Collective witnessing leads to an informed public and a system in which values and practices are more aligned The goal of all justice movements is to activate collective witnessing so that social practices reflect social values" (pp. 138–139).

Joy shrewdly highlights the immense hurdle animal advocates face in convincing a meat-loving world that there is a disconnect between our concern for those who suffer and our love of meat (and other animal products). Indeed, research shows that Joy's portrait of our current state as a state of collective dissociation is an accurate one. While meat eaters love meat, they aren't insensitive to the pain of farmed animals. One study found that relative to meat eaters, when vegetarians and vegans viewed images of meat dishes their brains produce heightened electrical activity occurring 300 to 700 ms after the images appeared (Stockburger, Renner, Weike, Hamm, & Schupp, 2009). Previous work shows that this late positive potential (or LPP) occurs when individuals are presented highly affective or aversive stimuli (Cuthbert, Schupp, Bradley, Birbaumer, & Lang, 2000). This brain response correlated reliably with meat avoiders' negative ratings of the meat dishes, highlighting their disgust towards meat.

Yet, despite differences in the affective reactions vegetarians and meat eaters have towards meat, these groups show little divergence in their affective reactions to the suffering of animals used to produce meat. In a recent unpublished study, my colleagues and I recorded brain activity (event-related potentials) from 20 meat eaters and 18 ethically motivated vegans, while they viewed images of farmed animals (cows, sheep, and pigs) being jabbed, prodded, and stabbed with sharp instruments (these were static images we constructed - no animals were harmed for this research, and ethical approval was obtained before collecting data; Piazza, Crespo Llado, Linnert, & McLatchie, in preparation). Both groups of participants produced a pattern of brain waves typically observed in studies of pain perception with human targets (see for example Suzuki, Galli, Ikeda, Itakura, & Kitazaki, 2015). Critically, compared to neutral trials where the animals were not depicted in painful situations, both groups showed comparably heightened reactions to the painful stimuli 200 to 700 ms following the onset of the images (vegans showed a heightened orienting response to animal pain as early as 100 ms, and this was the only reliable difference found between groups). Thus, we observed little evidence suggesting there is an empathic divide between meat avoiders and meat eaters in their attentional and emotional response to the pain of farmed animals.

In other words, while meat eaters and meat avoiders have different reactions to meat, their empathic response to animals looks quite similar. Although these findings are preliminary, they suggest that where these groups differ is not in their level of empathy, or potential for or when not thinking in their motivation to overcome the dissociation and denial we all face when thinking about animals as food, or not thinking about animals at all when eating them.

What to do?

Given that our failure to act on behalf of animals eaten is not due to a deficiency in empathy, but a failure to allow our empathy to guide our thinking as a result of other psychological processes related to mindlessness, motivated cognition, and rationalization, how might we make progress in our moral thinking about animals that we eat? This is one of the big questions researchers like myself wrestle with. We know that people do not like to be told that their actions, such as eating a delicious hamburger, is rife with moral implications. As we have seen, this causes defensive reactions, such as disparaging meat avoiders as moral "extremists" (Hodson, Dhont, & Early, this volume; MacInnis & Hodson, 2017), and drives motivated thinking (Piazza & Loughnan, 2016) and rationalization (e.g., asserting the nutritional benefits of animal products or our supremacy over animals; Piazza et al., 2015). As discussed above, there may be some value in having people confront their own reasons for eating animals. But this strategy is limited in that it relies on people being willing to engage in such counter-attitudinal thinking, and there must be convincing arguments available for consumers to be persuaded by, including the belief that eating meat is not necessary, natural, normal, or nice. Furthermore, people must have desirable alternatives to turn to, if they are going to give up something so enjoyable and habitual as eating meat.

The desire for meat is unlikely to abate any time soon. While the demand for tasty plant-based alternatives appears to be on the rise, particularly in Europe and the United States (Webber, 2017), the demand for meat also continues to soar (Waite, 2018). This makes the development of affordable, high-quality meat alternatives, such as the Beyond Burger and clean meat, key to confronting our motivated thinking about eating animals (see Leenaert, 2017). Because our desire for meat often guides our moral thinking about animals, rather than the other way around (Piazza & Loughnan, 2016), progress in this area will require the advancement, promotion, and uptake of desirable meat alternatives. As people come to see that they do not need to eat animals to be contented consumers, they will find the moral arguments against eating animals more palatable, and their motivations will cease to get in the way of extending moral courtesies to animals that we eat.

Waking up

In the case of unprovoked violence or neglect, we all agree animal cruelty should end. The problem is that eating animals is not a case of clear cruelty for many people. Through various processes, reviewed in this chapter, we have seen that people have many safeguards in place that help close themselves off from otherwise worrisome thoughts that they might experience when confronting the suffering of animals slaughtered for food. Thus, before any effort can be made to draw on the emotions and sympathies of caring people, we must first wake people up to the reality of our psychological predicament: when it comes to thinking about farmed animals,

our love of meat shapes what we believe is true about the lives and moral worth of these animals. In our efforts to aid animals, particularly farmed animals, we must not only consider the quality of arguments we present to people, but also address the underlying appetites and motivations that determine whether an audience will be at all receptive to listen.

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