# Metadata of the chapter that will be visualized online

Chapter Title	Far-Persons	
Chapter Sub-Title		
Chapter CopyRight - Year	The Author(s) 2017 (This will be the copyri	ght line in the final PDF)
Book Name	Ethical and Political Ap	proaches to Nonhuman Animal Issues
Corresponding Author	Family Name	Comstock
	Particle	
	Given Name	Gary
	Suffix	
	Division	Department of Philosophy and Religious Studies
	Organization	North Carolina State University
	Address	Raleigh, North Carolina, United States of America
	Email	gcomstock@ncsu.edu
Abstract	In his chapter, Gary Comstock introduces the notion of far-persons. Following Gary Varner, Comstock distinguished near-persons, animals with a "robust autonoetic consciousness" but lacking an adult human's "biographical sense of self," from the merely sentient, those animals living "entirely in the present." Comstock notes the possibility of a third class. Far-persons, he argues, lack a biographical sense of self, possess a weak autonoetic consciousness, and are able to travel mentally through time a distance that exceeds the capacities of the merely sentient. Far-persons are conscious of and exercise control over short-term cognitive states, states limited by their temporal duration. The animals in question, human and nonhuman, consciously choose among various strategies available to them to achieve their ends, making them subjects of what Comstock calls lyrical experience: brief and potentially intense pleasures and pains. But their ends expire minute-by-minute, not stretching beyond, Comstock says metaphorically the present hour. Comstock concludes by discussing the moral status of far-persons.	

## **Far-Persons**

**Gary Comstock** 

[At the London zoo] the keeper showed [Jenny, an orangutan] an apple, but would not give it her, whereupon she threw herself on her back, kicked & cried, precisely like a naughty child.—She then looked very sulky & after two or three fits of pashion, the keeper said, "Jenny if you will stop bawling & be a good girl, I will give you the apple."— She certainly understood every word of this, &, though like a child, she had great work to stop whining, she at last succeeded, & then got the apple, with which she jumped into an arm chair & began eating it, with the most contented countenance imaginable.

Charles Darwin, letter to Miss Susan Darwin, March 1838 (Darwin & Barlow, 1946)

G. Comstock (⋈)

Department of Philosophy and Religious Studies, North Carolina State University, Raleigh, North Carolina, United States of America e-mail: gcomstock@ncsu.edu

© The Author(s) 2017

A. Woodhall, G. Garmendia da Trindade (eds.),

Ethical and Political Approaches to Nonhuman Animal Issues, DOI 10.1007/978-3-319-54549-3 3

## 3.1 Introduction: What's It Like to Be a Pig?

Is Darwin right? Is Jenny the orangutan "precisely like" a naughty child? Can a nonhuman animal *sulk*, understand *admonishments*, and learn to control *her emotions*? Some biologists (Bateson, 2003) and philosophers (Griffiths, 1997) hypothesize that the behaviors of great apes have homologies with the behaviors of *Homo sapiens*, but this seems not to be Darwin's claim. Darwin's claim seems more radical: the mental, experiential, states of the orangutan and the child are *the same*. Should we believe Darwin about orangutans? And, if we should, what should we think about the mental states of our so-called food animals? Intuitively, Jenny seems to have more of what it takes to be a person than does, say, a pig. Even if Darwin is right about orangutans—*they* are like children—what about hogs and cows? Are the nonhuman animals we eat like children?

To answer these questions we must define persons, see to what extent the great apes qualify, and ask to what extent other mammals qualify. What are *persons*? Do *rights* attach only to persons? Might individuals with less-than-personhood status deserve the special protections rights afford? In his book, *Personhood, Ethics, and Animal Cognition,* Gary Varner provides nuanced and scientifically informed answers to these questions (Varner, 2012). I find his interpretations of the range and diversity of nonhuman animal consciousness compelling and will lean heavily on them in what follows. Varner understands and successfully eludes the two main interpretive mistakes: anthropomorphism, or ascribing human characteristics to nonhuman animals who lack them, and anthropodenial (de Waal, 1999), not ascribing human characteristics to beings who have them.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Over- and under-interpreting the data are only two of the most visible pitfalls. Science itself can be misleading if we naively assume that it will tell us all we need to know. As Tom Nagel famously observed, reductive physicalist accounts of, say, bat consciousness may explain and predict bat behavior but they may not be of any help whatsoever with our question, that is, what is a bat's internal subjective experience like (Nagel, 1974)? That said, science is critical for our task, in which we must triangulate three sources of information: systematic accounts of animal anatomical structures and neurological processes, neutral observations of animal behavior, and imaginative

Here is my strategy in this chapter. I intend to show that it is not difficult to enter other mammals' minds if we select the right kinds of human experiences as analogues. For nearly all humans have some of *the same* experiences as some other mammals. As my test case of other mammals I select pigs because they are the mammalian species slaughtered in the United States in the largest numbers.<sup>2</sup> I wager that if fairminded observers come to understand what pig consciousness is like, they will also come to acknowledge the rights not only of pigs but of all individuals I call "far-persons."

It is beyond the scope of this chapter to mount a thorough defense of my claim. Here, I will only describe what a human far-person is and suggest that their mental states are a stepping stone to the mental states of other animals. I agree with Temple Grandin, the Colorado State University animal science professor, when she writes that humans with mental limitations such as autism—a disorder with which she copes—are "a kind of way station on the road from animals to humans" (Grandin, 2005).

### 3.2 Persons

Varner defines a person as an individual with a biographical sense of self and, following a well-developed philosophical tradition, argues that individuals of this sort deserve special treatment. The concept of a person, then, has two components, normative and descriptive.

Normatively, persons are individuals who have achieved a certain kind of status and, for this reason, they must be treated in particular ways. In ordinary moral discourse, we express a person's status by saying that she has rights, valid claims to protection from being used by others,

renditions of how it may feel to be the animal in question (cf. Akins, 1993). This is the project I pursue here, however sketchily.

<sup>&</sup>lt;sup>2</sup> According to the United States Department of Agriculture, National Agricultural Statistics Service, US slaughterhouses killed 38,399,000 hogs in 2015. Of other mammals, cattle were the species killed in the greatest numbers, at 9,350,000. http://www.humanesociety.org/news/resources/research/stats\_slaughter\_totals.html?referrer=https://www.google.com/

110

111

112

113

115

116

118

120

121

122

124

125

126

127

128

129

130

131

132

133

138

140

142

143

144

claims that should rarely be denied. According to two-level utilitarianism, the ethical theory Varner defends, "rights" are important concepts in ordinary moral discourse and indispensable to what Varner calls the Intuitive Level System (ILS).<sup>3</sup>

What capacities must someone have to be a person? Descriptively, a person is an autobiographical being, an individual who understands the serial progression of her experiences as a temporal whole. This narrative self-understanding is active as well as passive, for persons can shape their lives into the kind of life they want it to be. To have a biological sense of self, an individual must be "rational and self-conscious, autonomous in the sense of having second-order desires, and a moral agent" (Varner, 2012).

Varner argues that existing evidence from animal studies suggests that no nonhuman animals have these capacities. He cautions us that not all of the evidence is in yet, and that we should not be surprised if future scientific discoveries cause us to change our minds. In the meantime, he continues, there are reasons to be skeptical that any nonhuman animals will be found to have "narrative self-constitution" (Schechtman, 1996). For being a person means not only that I have desires and understand myself as having a story I am living out in pursuit of those desires. It also means that I have desires about my desires and understand myself to be crafting a story—my story for myself. In this way I am not what Harry Frankfurt calls a "wanton," a cognitively limited human being without preferences about one's preferences and, so, no ability to rank them (Frankfurt, 1971). Unlike wantons, persons care about what sort of person they are, and about what others think of them. Persons perceive gaps between their present selves and their ideal selves, and we occasionally try to elevate our wants and desires to match our ideal wants and desires.

To live as an active "narrating" self I must be rational, autonomous, and self-conscious. One way to understand this claim, a way not

<sup>&</sup>lt;sup>3</sup> ILS rules are the rules we ought to adopt to govern our everyday behavior. The ILS system differs from what Varner, following R. M. Hare, calls the critical level, the set of rules and principles we adopt when we have the time and resources actually to try to maximize the good. When thinking critically, we may realize that, in extremely rare situations, achieving the overall good might require us to violate rights. The details of two-level utilitarianism are beyond the scope of our focus here, but I note that the utilitarian rules needed to protect persons have, as Varner puts it, "a deontological flavor."

inconsistent with Varner's view, I think, is to focus on the relationship between narrative, language, and time. Narratives are made of propositions and propositions are made of words. It takes more time to form and understand a proposition than it takes to form or understand a word, and more time still to understand a narrative.

146

147

151

152

153

157

162

163

167

168

170

173

174

177

Words can be used to name objects, and such nouns can in turn be conjoined with verbs to form phrases. The order of the words can be changed to change the meaning of the phrase, and new phrases can be inserted into other phrases to form sentences. Sentences can be strung together into narratives which invariably have plots. Without the ability to think in plots, I arguably do not have sufficiently developed linguistic tools to understand the nuanced interplay of temporal sequences necessary for another capacity. The capacity to be a moral agent requires that I understand the plot in which my decisions conflict with other characters' decisions in scenes that involve our mutual entitlements and responsibilities. Plots emerge when persons threaten each other and when we must respond to such threats—cooperatively or agonistically. Suppose, as seems true, that children take many years to acquire the complex linguistic skills necessary for narrative self-constitution. Suppose that only animals with large brains living in complex social networks are capable of evolving to the point where language teachers will devote years of their lives to developing the ability of the young narratively to constitute themselves. If these are the facts about what it takes to produce a person, it is unlikely that we will discover any nonhuman animals outside the sphere of human culture with a biographical sense of self.

So neither orangutans nor pigs, it seems, can be persons if persons come into being only as individuals grasp the fact that other individuals are, like them, conscious moral agents capable of shaping their own biographies. For to grasp this fact, a person needs a theory of their own mind that provides the story by which they form the desire to have correct, just, *right* desires, desires that properly guide their treatment of others. Persons are oriented, therefore, by the past, that is, by their conscious memories of how they have acted, morally and immorally. Such memories imbue a person's present with a valence that orients them to the future.

### 44 G. Comstock

Without a conscious past, an individual has no impetus. But without a conscious future, one has no trajectory. If pigs have only procedural, habitual, memories, they do not have the kinds of cognitive resources necessary to understand where they are, psychologically speaking, much less form a picture of where they want to go. If pigs do not consciously remember where and when specific events occurred or what and why they behaved in certain ways toward other pigs, they cannot access their past in the way required to adjust their behaviors to their ideals in the future. They cannot, if this account is correct, deliberate, for example, about the implications of their past conflicts with other pigs. Nor can they try out alternative hypotheses about how they should act toward an agonistic conspecific in the future in order to rectify past wrongs or prevent future trouble. If pigs lack episodic memory and executive control of desires, they do not have the kind of agency necessary to have a future of their own.

How would we know if a nonhuman animal were an autonomous agent capable of reflecting on her past, examining her motives and intentions, and making future decisions in line with her values and ideals? Varner suggests some empirical measures; the mark test as a way of assessing self-recognition, story-telling about one's past as a test for episodic memory, caching food for future use as a sign of future planning, and deception of conspecifics as a harbinger of theory of mind. Before we look at the evidence in each of these areas, let us say a further word about theory of mind, the ability to understand others' behaviors as motivated by their mental states.

Having an understanding of my own mind goes hand in hand with having a theory of others' minds, especially if the ability to understand the behavior of others as motivated by *their* mental states is a corequisite for understanding my own behavior as motivated by *my* mental states (cf. Carruthers, 2011). If a person's life has a narrative trajectory that gets its direction from conscious awareness of one's past and future, and this self-conscious narrative trajectory is itself dependent upon understanding the lives of others as having a similar narrative structure, then the self-conscious capacity to think of oneself as a character in a story, made possible by the mind-reading capacity to think of others as characters in their stories, has important ethical implications.

The normative features of personhood arise with the appearance of theory of mind. For the trajectory of a person's life is aimed by them at goals they establish. It is the basis, too, of their personal understanding of what a good life is for them. To this extent, we are in control of our own behavior—or, at least, it certainly feels that we are. Whether we in fact have free will is immaterial to the pain we feel when others interfere with our plans or in other ways frustrate us in our pursuit of our goals. Being bound physically or psychologically against our will is, all else equal, a form of enslavement. Enslaving someone is prima facie wrong for many reasons, including that it violates their autonomy. To live a good life, agents who feel they are free should be allowed to think freely and to make decisions for themselves. For when others seek to control my thoughts and actions, they diminish my happiness and violate my right to liberty.

Individuals who do not experience the kind of freedom that comes with a biographical sense of self cannot be disrespected in the same way that persons can be disrespected. For if one never has the feeling of freedom, how can one feel its loss? If pigs do not aspire to live according to certain ideals the reason may be that they do not have the capacity to exercise executive control over their behavior. If pigs cannot choose to inhibit lesser desires in order to satisfy more important desires, they cannot choose, either, to govern their behavior according to their ideals.

In sum, persons have a biographical sense of self. They are rational and self-conscious, have desires about desires, and feel that they can act freely as moral agents. The mental tools necessary to constitute oneself narratively are concepts and words, phrases, and propositions used to describe good and bad characters and desirable and undesirable plots. Because persons have the feelings of freedom, they are morally responsible for their actions. For all of these reasons, persons are entitled to special protections.

### 3.3 Near-Persons

Individuals who lack a biographical sense of self but have what Varner calls a "robust autonoetic consciousness" cannot narratively self-constitute because they lack the requisite long-term episodic memories, long-term

255

259

260

262

265

270

280

282

285

personal goals, and the feelings of being free to shape their narrative. However, because they have a rich, deep sense of the recent past and because they have procedural memories and facial recognition, they can become conscious of themselves and others. They are capable of learning how to perform new tasks, of taking pleasure in their successes in this area, and capable of making plans for the intermediate future. By "intermediate future" I mean, roughly, the rest of today and, a bit more precisely, a future that stretches out as long as a few dozen minutes and perhaps a few hours, but not beyond the onset of the next sleep-cycle.

Robust autonoetic consciousness requires that an individual possess some of a person's cognitive capacities, including the ability to understand concepts and to interpret others' bodily gestures and vocalizations as meaningful signs, that is, words or directives. Words are sounds emitted by a sender who uses the representation to designate objects to a receiver. Directives are sounds used to request or demand specific responses. Near-persons understand representation and causality. What they do not understand are propositional attitudes, the linking of nouns and verbs to form grammatical phrases. Grammar allows us to form novel propositions by doing nothing more than recursively changing the order of words and phrases. Recursion allows us to embed phrases within phrases, and other phrases within those phrases—and so on, and so on—almost without end. With words, phrases, and propositions, one can create narrative plots full of characters enacting what Aristotle called "drama." Plots, moral agency, and characters all become possible with narrative, but only with narrative. Without plots and characters, with only the lower-level cognitive resources of words and rudimentary grammar, the possibility of an animal narratively constituting itself disappears. Only autonoetic consciousness remains.

Varner reviews the evidence about nonhuman animals' use of language and concludes that no nonhuman animals have the ability to understand propositions, much less conjoin them into narratives. It is clear, however, to me at least, that many pigs as well as orangutans understand gestures and vocalizations as full-blown *representations*, that is, concepts and, further, as *words* and *directives*. I employ those two words intentionally without any ambiguity in their meaning. Nor do

I commit any anthropomorphizing mistake in using them. For while nonhuman animals apparently lack a full-blown biographical sense of self and are not characters, they need not have narrative in order to have exactly the same semantic resources possessed by human near-persons. When a vervet monkey vocally signals to another the presence of a specific predator, such as a leopard (or eagle, or snake), the monkey is using a word with pragmatic force (Seyfarth & Cheney, 2012). It is, literally, issuing a warning using a word that, translated into English, would be something like "leopard!" (or eagle! or snake!).

Some nonhuman animals also seem to perceive, understand, and represent their bodies as their own and so to be self-conscious. Individuals who pass the mark test (by wiping away a mark on their face when seen in a mirror) seemingly must have a memory of what their body looks like and the thought, "that image in the mirror is my face." For if they see a strange mark on their forehead and try to remove it, they must have not only a procedural, habitual memory of how to wipe their forehead but an episodic memory as well of how their face is supposed to appear. "My face is not supposed to look like that face." And it would seem they must further have some anticipation about how their face will look again in the near-term future after they have wiped the mark away. "Soon the image in the mirror will look like me again."

All of these claims about the capacities of some mammals (in this case, great apes) are consistent with the claim those animals have a robust proprioceptive sense of their bodies, an intermediate past, and an intermediate future. But these capacities are a far cry from propositional knowledge, long-term temporal horizons extending beyond the next few hours, executive control of one's behavior, narrative understanding and creativity, and moral agency. A chimp may desire to wash her face now but she does not want, for all we know, to clean up her social image starting first thing next week.

Orangutan Jenny doubtless has several stories that could be told *about* her life, but every such story will be the creation of a human person. Her life goes well or poorly for her and she has a welfare that can be promoted or undermined. But if, as I assume, orangutans lack second-order desires, Jenny does not have desires about which of various life-stories open to her

she would prefer to pursue. Nor does she have preferences about which sort of reputation she would like to have among her peers if she cannot entertain various visions of the good life or freely choose to pursue one ideal self over another. Consequently, Jenny does not and cannot tell herself or others the story of her life.

Which nonhuman animals may be near-persons like Jenny? Reviewing the evidence, Varner argues that the category includes great apes, cetaceans, elephants, and, perhaps, corvids and parrots. To defend his claim that great apes do not have the kind of episodic memory required to have a biographical sense of one's past, he examines the evidence provided for believing that Koko, the gorilla, has narrative and uses it to communicate deeply emotional personal memories from the distant past.

Koko was five years old in July, 1976. According to Francine "Penny" Patterson, who worked more closely with Koko than anyone, in 1976 Koko narrated an event that had happened three days prior: (P = Patterson; K = Koko)

```
P: What did you do to Penny?
```

K: BITE.

P: You admit it? (Koko had earlier called the bite a SCRATCH.)

K: SORRY BITE SCRATCH.

(Penny shows the mark on her hand; it does resemble a scratch.)

K: WRONG BITE.

P: Why bite?

K: BECAUSE MAD.

P: Why mad?

K: DON'T KNOW

(Patterson & Cohn, 1994, p.282)

Koko's one and two word responses here, drawn from her knowledge of more than a thousand American Sign Language (ASL) signs, clearly show an understanding of concepts, words, and causal relations (What did you do to Penny? BITE). However, as Varner notes, there is no evidence here of episodic memory, in which one remembers oneself at a particular place at a particular time. Koko is using ASL which, Varner tells us, does not include tenses. Consequently, he observes, "temporal references must

generally be inferred from the context, and in these studies, that context is provided by the English sentences uttered by the human trainers" (Varner, 2012, p.155). Varner has his doubts about whether Koko is here communicating a conscious memory of what happened three days ago. Rather, Koko may simply be making signs she knows will succeed in eliciting the responses Koko desires from Patterson.

362

363

372

373

377

379

383

390

391

393

30/

But if Koko is not capable of expressing memories of events three days in the past, she is able to communicate her emotions. When asked, "How do you feel?" she will respond appropriately, for example, with FINE, or HUNGRY, or SAD. In children, internal immediate-state language reporting one's mood emerges in the third and fourth years. We are on firm ground, then, in thinking Koko has words and concepts, social communication, rationality in the sense of cause and effect thinking, emotions, awareness, and beliefs and desires. But she does not seem to have the second-order desires, executive control, or autonomy required for a biographical sense of self.

Varner is similarly cautious about long-term memories allegedly recounted by a gorilla, Michael, who was captured by poachers as an infant. Patterson made a video of Michael allegedly recounting this memory of the incident in which Michael's mother was killed. In the recording we see Michael's signings rendered in the following captions provided by Patterson: "SQUASH MEAT GORILLA. MOUTH TOOTH, CRY SHARP-NOISE LOUD, BAD THINK-TROUBLE LOCK-FACE. CUT/NECK LIP(GIRL) HOLD" (The Gorilla Foundation, n.d.). Varner, noting the ambiguity of the string of words, observes that "even Patterson's sympathetic co-author Eugene Linden doubts her claim that Michael was telling the story about his mother's death" (*Ibid*, pp.155–156). Varner concludes that in spite of such anecdotes and Patterson's claim that Michael told her this story on several occasions, there is "no good evidence that apes understand or use language to express thoughts about the non-immediate past" (*Ibid*, pp.156). If Varner is wrong and Michael is recounting an episodic memory, Michael has an important claim to personhood. If Varner is right, perhaps Michael is just making signs he thinks Patterson is subconsciously nudging him to make, perhaps in Clever Hans fashion. In that event, Michael may not have episodic memories of the traumatic events.

Rather, he may only be signing in sequences he has learned satisfy Patterson's promptings.

In sum, near-persons are sentient, rational beings with a clear sense of the world around them. They learn from their experiences and are conscious of events in the intermediate past. They can make plans concerning the intermediate future. But they lack what persons have, a full-featured biographical sense of self. Near-persons do not have second-order desires about their desires, episodic memories, or plans for tomorrow. They do not have a theory of mind, cannot tell others stories about themselves, and cannot shape their lives in accordance with their values.

## 3.4 The Merely Sentient

Varner's "merely sentient" nonhuman animals are individuals who live entirely in the moment. Attracted to favorable stimuli and repulsed from aversive stimuli, the merely sentient are neither able to exercise control over the external forces that move them around in the world nor are they conscious of those forces. The merely sentient do not have emotions, rationality, or a robust sense of the world around them. They do not learn from their experiences, recognize the faces of conspecifics, or engage in social communication.

Which nonhuman animals are merely sentient? Whether fish feel pains and pleasures is a matter of some dispute but assuming that fish are sentient, this capacity may be the full extent of their mental powers. In his earlier book, *In Nature's Interests?*, Varner observes that fish fail tests of conscious problem solving, such as multiple reversal trials, and suggests that if they learn from memories at all they learn only implicitly and subconsciously (Varner, 1998). If fish feel pain but have only the vaguest sense of immediate past events and an even less explicit and shorter view of the future, fish are merely sentient.

What is it like to be merely sentient? Can one think about one's future at all? Here is what Varner writes:

The merely sentient may experience a sense of ease based on what psychologists call 'implicit memory' or anxiety based on what we might

call 'implicit anticipation.' An implicit memory is one that affects one's choices, but without being available for conscious recall. (Varner, 2012, p.162)

Squirrels, Varner claims, do not plan for the future, have episodic memories, narrative autobiographies, or theory of mind. They are not persons. But neither, Varner surmises, are they near-persons because there is no evidence that they recognize themselves in mirrors, have personally indexed memories, or plan for the future. They have implicit memories and implicit anticipations, but these capacities are not sufficient to form conscious plans for the future. A squirrel hoarding acorns consciously desires "to get each acorn into its stash" but "is completely unconscious of the purpose of its hoarding behavior" (*Ibid*, p.164). Since, Varner continues, the squirrel is not aware of the reason for its behavior, or of the long-term benefits of stashing, the animal consequently:

...can achieve no sense of satisfaction when it has stashed enough acorns. It cannot, in effect, say "There, I've accomplished *that*! Since *that* (the goal of laying up enough acorns for the winter) is something of which it is not conscious." (*Ibid*)

Varner allows that the squirrel can "achieve a sense of satisfaction" from getting an acorn into her stash. Squirrels have simple desires ("get this acorn into that hole") and simple beliefs about cause and effect ("dropping this object into that gash will get this acorn into that hole"). But Varner does not allow, nor does it seem true, that the squirrel can get satisfaction from having put in an honest day's labor, as it were. If the squirrel does not possess the intermediate-level concepts of "a day's work" or "the cold season"—much less the higher-level concepts and grammar necessary to form propositions ("If I fail to put in a sufficient number of good days of work I will run out of acorns and face catastrophe in the cold season to come")—the squirrel cannot have the narrative knowledge required to constitute herself as a subject who endures across a series of temporally discrete events. Given what we now know about squirrels, it seems right to say that they are not capable of the kind of experiences had by Jenny and Koko.

To summarize, the merely sentient feel pain and pleasure but lack the ability to reflect on them. Their temporal horizons stretch outward from the present, but no further into the past than a few seconds and hardly, if at all, into the future. They lack a robust autonoetic consciousness.

# 3.5 The Problem, Restated: Are Pigs Merely Sentient?

Varner suggests that while we presently do not have evidence for autonoetic consciousness in any nonhumans other than the candidates for near-personhood, such evidence may be forthcoming as we become more skilled at testing for the target capacities. Meanwhile, he points out, we must make policies regarding the so-called food animals. He suggests that we adopt what he calls the "Rumsfeld response," namely, that we do the best we can, forming regulations based on the evidence we have rather than the evidence we wish we had. By implication, then, since there are only two categories available, near-persons and merely sentient, Varner's framework would categorize pigs as merely sentient. At least for the moment. And, at least for the moment, this understanding of pig consciousness would allow the killing of pigs for food since the value of a pig would, in Peter Singer's word, be *replaceable* (Singer, 1993). As long as one merely sentient animal is brought into the world every time one like it is dispatched, overall value is conserved.

Varner does not claim that pigs are merely sentient, but he finds no experimental evidence to date that pigs pass the mark test, attribute false beliefs to conspecifics, communicate to each other about their plans, and so on. A positive case for the conclusion that pigs are merely sentient and replaceable can be found in the kinds of arguments made by Donald Davidson and R. G. Frey, arguments that coincide with Varner's assumptions about squirrels, that the animals lack intermediate- and higher-level concepts such as "a day's work," "the young ones to be born tomorrow," and "putting in a good day's work preparing for the births to come" (Davidson, 2001; Frey, 1980). If pigs lack intermediate-level

concepts it is probably because they lack the linguistic capacity to form the phrases necessary to have the concepts in question. Lacking grammar and propositions, a sow cannot have a sense of satisfaction in reviewing her day's activities. Nor can she take pleasure in the fact that she has, for example, "built an enviable nest in preparation for the piglets," even though this is precisely what she has done.

506

507

508

511

512

513

517

521

522

523

527

528

533

534

Why can't she take such pleasure? Because her implicit memories and implicit anticipations are neither temporally extended in the way required nor is she capable of hooking them consciously together into a narrative. Neither are they pegged by the pig to herself. Consider a free-range sow, Oreo, building her nest (HeatherF27, 2007). Oreo apparently does not consciously plan for the future birth of her offspring even as she aims to get this mouthful of straw into the place she thinks it ought to go. For she is not conscious of the purpose of her movements in serially taking mouthful after mouthful of straw and placing them in a large pile. If this is the right description of how it feels to be a pig making a nest, as I believe it is, the sow is conscious of goals she aims to achieve in the next few dozen minutes but not conscious of any overarching goal she may achieve by successfully completing a series of such acts. Oreo can achieve satisfaction from successful completion of the proper placement of this mouthful of straw but not from successful completion of behaviors we would call, were they performed by a woman, maternal activities in preparation for tomorrow's births. To paraphrase Varner, a sow cannot, in effect, say, "There, I've accomplished that!" since that (the goal of preparing a warm nest in preparation for partuition) is something of which the sow is not conscious (cf. Varner, 2012, p.164). If all of this is correct, how it feels to be a squirrel or pig would be the same as how it feels to be a fish.

But is this correct? Isn't the nest building behavior itself evidence that Oreo has intermediate-term beliefs and desires? For it is essential to our description of her behavior that she is building a *nest*, an activity that takes hours to complete. Given her behavior, mustn't we allow that the sow has temporal horizons of a sufficient length and complexity to achieve this end? Her fussing with various configurations of the straw, hour after hour, strongly suggests she is making judgments about how well she is achieving the overall end. She does not serially grasp mouthful

547

548

553

557

558

560

563

564

565

570

after mouthful of straw and randomly place one here and another there. Nor does she suspend operations after a few minutes, turning her attention to other matters. If she behaved in this way, we might think she was not *building a nest*. Were she to spend every waking hour moving straw hither and yon, all day long whether pregnant or not, we might think her a wanton who knows not what she does.

But these are not proper descriptions of Oreo's behavior. First, she is pregnant; there is a reason for her behavior. Second, she pursues her straw moving behavior all morning. Third, she is free to stop and start as she wishes; she is neither playing around aimlessly nor anxiously pacing stereotypically. Fourth, she does not cease what she is doing until a structure sufficient to warm her coming offspring is in place. The evidence is that Oreo has in mind a project that will take her many minutes, perhaps hours, to finish. And this is evidence that points to an important difference between porcine and fish consciousness. I can think of no clearer way to put the difference than in temporal terms. Whereas the "temporal window" of some fish is, according to some observers, confined to a few seconds, the temporal window of the pig stretches out for many minutes, perhaps as far as an hour. At the beginning of her work, Oreo initiates a project that she cannot accomplish now. And to make good decisions about which step to take next, she must represent what she has built so that she can compare it with the image of what she intends to build. The structure she foresees will require for its completion dozens of minutes of activity on her part, activity of which she is conscious. Or so the evidence would suggest.

Hold on, one may object. The argument thus far has been based on anecdotal evidence and arm-chair philosophy. Fair enough. Let us consider a controlled experiment.

In a maze test conducted with two sows who forage together on a daily basis, researchers placed two buckets behind a series of barriers (Mendl, *et al.*, 2010). Only one bucket contained food. One pig, whom I will call Informed, was allowed to search the arena to find which bucket had the goods. She was then removed from the pen. Soon thereafter the arena was reopened and Informed was allowed back in. This time, however, she was accompanied by her larger mate, call the

mate Uninformed. The researchers' first question was, Can Uninformed figure out that Informed knows where the food is and exploit that knowledge in her attempt to eat? The answer is yes. The naïve animal followed the smaller animal, apparently intuiting both that (a) Informed was hungry, and (b) Informed knew where the reward was located.

578

579

585

594

595

599

600

601

602

606

607

610

611

The researchers discovered something else. After several iterations of the trial, Informed began to exhibit behaviors suggesting that she was reading Uninformed's mind. Upon entering the arena, Informed resisted the impulse to head straight for the food. She took a meandering path and did not head straightaway for the bucket. Was she trying to throw off her heavier mate? There is no other plausible explanation. Whereas Informed would initially go straight to the food, soon she began secretive maneuvers. She'd move first behind a barrier and, keeping a steady eye on her mate, wait until Uninformed was out of sight. She would then, and only then, dart for the food.

Does Informed have the discriminative ability to see the world from Uninformed's perspective? Are her deceptive movements' evidence that she can shift her point of view to another pig's point of view? Clearly Informed is inquisitive and attentive, conscious of her surroundings, and able to learn the locations of objects. But she may also be suppressing a strong desire to eat believing that doing so will allow her, in the long run, to get more food. If this is what she is doing, then Informed is consciously foreseeing the future, traveling mentally forward in time, imagining herself alone at the trough. She is also rank ordering her preferences, exercising executive control of the desires on which she chooses to act. If she has these capacities, she may be thinking the equivalent of "I must move my body over in this direction, watch for my opportunity, and then run quickly to the bucket." And if she has these capacities, she is capable of seeing two possible future scenarios one in which she is alone with the reward, one in which she is accompanied by Uninformed. She is also capable of consciously choosing the future scenario she most desires, and she is capable of purposely controlling her emotions in order to achieve it. On this interpretation, Informed has the abilities to form hypotheses about how to achieve her goals, consciously to decide on the path she thinks most likely to help her achieve her chosen end, rank order her preferences, read

615

616

620

625

626

629

630

632

635

640

642

64

another pig's mind, and act on the preference she has given highest priority. Can Informed think these thoughts?

I doubt it. The current evidence does not support such a conclusion. While we might understand a person's analogous behavior as motivated by the kinds of cognitive states just described, we have little evidence at present to think that Informed has the ability to understand other pigs' behaviors as motivated by mental states. In the absence of such evidence, the anthropomorphizing dimensions of the interpretation are unwarranted. If we assume Morgan's Canon, as we should, we must prefer simpler, lower-level explanations over more complicated explanations. The rule is only to attribute additional, higher-level, second-order psychological capacities when no sufficient lower-level explanations are available (Karin-D'Arcy, 2005; Morgan, 1903). However, in the food-seeking behavior, one can explain the pig's movements in terms of first-order weak and strong beliefs and desires (Carruthers, 2008). For Informed has two conflicting desires: a desire to eat now while sharing with a mate, and a stronger desire to eat later while not sharing with a mate. Informed has two consistent beliefs: a strong belief that if she runs directly to the food she will have to share it, and a strong belief that if she first deceives her mate she will not have to share it. So, given her beliefs and her strongest desire, she acts on the stronger desire.

We need not attribute a theory of mind to Informed to explain her behaviors because her behaviors can each be explained in terms of "world-directed" beliefs. World-directed beliefs are beliefs about objects in the world as opposed to subject-directed beliefs, which are beliefs about subjects—other minds or persons. Nor need we postulate that Informed has the capacity for executive control of her preferences because the first-order, world-directed interpretation just offered will suffice to explain her movements. Informed forms one association over the course of several trials that if food is in location X and no other pigs are in the arena, the best course of action is Y, to run straight to the food. She forms a second association that if food is in location X and other pigs are in the arena, the best course of action is Z, to meander away from the food, to monitor the other pig's location and when its head is positioned in a certain way, to run straight to the food. If so, Uninformed's

behavior is causally determined by whichever set of environmental conditions obtains.

A deflationary interpretation of Informed's behavior inspired by Morgan's Canon undermines the claim that she has all of the psychological capacities of a near-person. But it does not undermine the claim that she has some of a near-person's cognitive skills. To the contrary, it is accurate to say that Informed *feels* hungry, *desires* to try to lose her mate, and *believes* that moving away from the food will buy her precious competitor-free seconds at the trough. While the sow does not have robust autonoetic consciousness, however, she has more than mere sentience. She is able to formulate hypotheses, hold them in mind, and choose among them. She is able to defer acting on immediate desires to make possible the satisfaction of longer-term desires.

With respect to its duration, mammalian consciousness is unlike fish consciousness. First, unlike fish, pigs and squirrels have conceptual representations of objects such as acorns and sheaves of straw. Second, they have the short-term projects of getting this acorn into her stash and placing this sheaf of straw in an advantageous position. Third, they can recognize faces and respond to others. They have basic social emotions such as happiness and sadness. Fourth, they have basic communicative mechanisms they can consciously deploy to alert and inform conspecifics of dangers and opportunities. Fifth, they can use their communicative mechanisms to deceive others. Sixth, they can learn to maximize rewards by systematically mirroring the choice that was rewarded on the just-completed trial (Varner, 1998). As these capacities are not available to the merely sentient, we need a new category to represent these nonhuman animals.

### 3.6 Far-Persons

A far-person is an individual with non-narrative experience, or what I will call "lyrical" experience. A lyrical experience has a short duration with a "minute" temporal horizon stretching no more than an hour or two into the past and several minutes into the future. Lyrical experiences are simple and often relaxed, or diluted. That said, these short simple

experiences can also be intense, concentrated, powerful. The "of the moment" experiences of far-persons can be profoundly pleasurable and horrifyingly painful. But they are not foreseen and their after-effects do not persist in conscious memory. Far-persons cannot recall their experiences later. They cannot organize their lives so as to produce more pleasurable experiences or fewer painful experiences.

Lyrical experiences do not involve episodic memories or episodic anticipations. They do require the ability to become habituated to new circumstances, to learn new skills, and to develop novel beliefs and desires based on implicit memories. On the basis of such unconscious psychological capacities, individuals can form conscious hypotheses and set goals for the short-term future. Lyrical experiences are laden with value and often involve the so-called four basic emotions: happiness, sadness, anger, and fear or surprise (Jack, *et al.*, 2014). Finally, lyrical experiences involve awareness of one's achievement; far-persons can take pride in their successes and be frustrated by their failures.

Like near-persons, far-persons are sentient and conscious. They have beliefs, desires, and emotions. They understand causal relations and can reason about the best ways to achieve their objectives. They have a point of view; they can remember the faces of their conspecifics and what those conspecifics were doing a minute or two ago. However, unlike near – persons, far-persons lack a robust autonoetic consciousness. They cannot see their bodies from another's perspective, do not have desires about their desires, and lack temporal horizons stretching beyond the present hour or two.

A far-person's memory cannot index one's self to yesterday, placing one's body in relation to temporally-ordered events or use the past as the basis for tomorrow's plans. The individual a far-person is today has few if any conscious psychological connections with the individual they were yesterday or will be when they next awake.

Before we proceed I must clarify an important issue. Far-persons are not non-persons. A Non-persons are nonconscious organisms whose

<sup>&</sup>lt;sup>4</sup>I depart here from the way Varner uses this term. He uses "non-persons" to describe any individual who is not a person. I use it, instead, to refer more narrowly to that set of sentient individuals that lack consciousness altogether and, therefore, any traits of far-persons.

autonomic systems maintain homeostasis and respond to environmental changes by moving toward attractive stimuli and away from aversive stimuli. Non-persons may be sentient but their lack of consciousness means that their pains and pleasures are not accessible to them. There is, in short, no "them" there, as it were, no central information gathering and processing system to integrate across time the organism's mental states, if it has any. Non-persons, as I say, may or may not be sentient, but they utterly lack concepts, words, beliefs, desires, and emotions. Their ability to respond to environmental signals is to be explained as blind movement determined by physical forces. Humans who exist from birth to death in permanently vegetative states are non-persons for, apart from their physical resemblance to us, they are not recognizable as the kind of beings we are.

722

723

727

729

737

750

751

754

755 756

Allow me one example. ID was born in 1959 unable to swallow, move, or vocalize. By her twenty-third birthday she had made no progress. She lay in bed, permanently comatose until she died at age 27. She learned one lesson when the nurses who cared for her decided to train her to signal them when she eliminated urine or feces. Under their tutelage, JD "learned" to squeeze a button when she was wet. Apart from this one accomplishment, however, JD showed no signs of habituation, procedural memory, or short-term desires. She never reached out to others, spoke, or held objects. She did not swallow when prompted, cry when poked, or laugh when tickled. She did not try to adjust herself in bed, turn away from light or toward a voice. She did not try to make the room temperature warmer or cooler. The nurses who trained her to signal them when she needed changing did not regard her button-pushing movements as conscious or intentional. Rather, they thought of them as Pavlovian automatic reflexes, conditioned responses to a stimulus. JD died in 1986 of complications related to pneumonia, never having exhibited any of the most rudimentary signs of being a farperson (Comstock, 2009, 2010). Apparently, human organisms can exist for decades not only without becoming far-persons but without ever having the potential to become one.

759

760

76

763

764

765

766

769 770

773

775

780

785

786

787

79

We must be very careful before deciding an individual is a nonperson for we know of many cases of persons unable to communicate or move because of physical limitations. In cases involving neurological damage, such as "locked-in" syndrome and amyotrophic lateral sclerosis, persons are unable to let others know they are psychologically intact. These cases are not the cases I have in mind when referring to non-persons.

Far-persons, as I say, are neither merely sentient nor non-persons. They have beliefs and desires, and can act rationally. They understand cause and effect and can recognize faces. They have lyrical experiences and temporal horizons, however minute. Table 3.1 summarizes their relationship to persons, near-persons, and non-persons.

I turn now to a normative question.

# 3.7 What Is the Value of Lyrical Experience?

To answer this question let us briefly survey three human cases that, I suggest, are candidates for far-person status.

Brooke Greenberg was born in 1993 with an unknown neurological condition diagnosed only as "Syndrome X." She died at twenty years old, never having weighed more than sixteen pounds or having attained the mental capacities of more than a one-year-old (Walker, *et al.*, 2009). The seventeen-year-old Brooke recognized family members and demonstrated object constancy by, for example, tracking the dress she preferred when her mother would playfully hide it behind another dress. She enjoyed watching television with her sisters, gave appropriate if child-like responses to their simple commands and requests, and vocalized her displeasure at faces and events that displeased her (Bethge, 2010). She produced few sounds, if any, recognizable as words (Brown, 2009), but could vocally express to others an emotional repertoire that included affection, fear, and anger.

To try to understand how it feels to be a far-person, imaginatively recreate the point of view of a one-year-old. Just now, for example, picture Brooke trying to answer her mother's question about which outfit she likes best. Her mother holds up two dresses. Brooke nods in the general direction

Table 3.1 Far-persons

	Persons	Near-Persons	Far-Persons	Non-Persons
	Biographical	Autonoetic	Lyrical	No
	sense of self	consciousness	consciousness	consciousness
SIMPLE MINDS	Yes	Yes	Yes	No
Unified perspectives consisting of first-order				
beliefs and desires				
Have words: Understand concepts, obey com-	Yes	Yes	Yes	No
mands, issue warnings				
Facial recognition	Yes	Yes	Yes	No
Six basic emotions	Yes	Yes	Yes	No
Form hypotheses and choose rationally among	Yes	Yes	Yes	No
them to satisfy desires				
COMPLEX MINDS	Yes	Yes	No	No
Selves exercising executive control over short-				
term beliefs and desires				
Have propositions: Understand sentences	Yes	Yes	No	No
Executive conscious control over short-term desires	Yes	Yes	No	No
Self-consciousness	Yes	Yes	No	No
PERSONS	Yes	No	No	No
Morally responsible agents				
Have narratives: Understand plot, character, mood	Yes	No	No	No
Have moral agency and responsibility	Yes	No	No	No
Have categorical desires, long-term desires to	Yes	No	No	No
make something of one's lifetime				

831

832

833

835

838

841

842

845

848

851

852

853

855

858

859

86

862

863 864 of the objects, and her mother smiles at Brooke's apparent choice. Brooke in turn grins. I call attention to her smile, an intense lyrical expression of contentment. The feeling is confined to the moment, it is not available to Brooke for reflection or revision, and minutes later Brooke will not remember it. And yet, at the moment it is deeply pleasurable for her.

The second case is Susan Wiley, known in the literature as Genie, a girl locked in her bedroom by her father from the time she was twenty months old until she was freed at thirteen years of age. Let us try to go inside the confined girl's head. She is, at the moment, responding to her brother, whom she trusts. He has poked his head in her door because he has a new toy for her. How does she feel? She recognizes her brother's face and distinguishes it both from her father's face and from her mother's face. Her brother puts her at ease. She is able to track the hand that contains the toy as he hides it playfully behind his back. It has been a few minutes. She has heard her neighbor practicing piano, pleasant sounds that compete with the songs of a waxwing that also waft through her open window. She gives appropriate if child-like responses to her brother's whispered assurances that her having the toy will be ok with Father. Clearly she is capable of fear, anxiety, anger, and affection. She can understand that words express speakers' intentions and that words can be used pragmatically to issue assertions, requests, promises, and warnings. When freed, she will understand a dozen or so words (e.g., mother, father, door, bunny), and react appropriately when they are used to refer to their objects. However, she will only be able to generate and verbalize two ideas, each idea pronounced as a single word, "/stäpit/" and "/nōmôr/." She will not be able to learn to use grammar to string words together into sentences, use phrases recursively, or tell stories (Brown, 2009).

Forget all that. Just now, focus on Susan's fascination with what her brother produces from behind his back: her old familiar ragdoll in one hand and, in the other, a shiny new yellow duck. Curious, she is reaching eagerly for the unfamiliar object. She is smiling.

What is happening in this girl's consciousness as she examines each toy and turns away from the familiar one? She is having implicit memories, conditioned responses or habituations activated by situations requiring the exercise of practical skills or habits

(Tulving, 2002, 1984, 1983). She is not having an episodic memory, explicit replaying a tape, as it were, in which she sees herself dragging around the ragdoll yesterday. She does not watch any episodes in her mind or place herself in the frame as the subject of experiences who must choose between two objects. Her memories are not indexed to specific place or time. And yet she smiles, and there is no doubt she feels happy.

During the years spent in captivity, Susan Wiley lacked secondorder desires, the ability to form propositions, and the capacity to understand or produce narratives. She did not use the first-person pronoun and, in the judgment of Susan Curtiss, a sympathetic researcher who probably knew Susan Wiley better than anyone else, Wiley probably did not have a concept of herself when she was found (Curtiss, 1981, 1977; Fromkin, *et al.*, 1974). After years of intensive language therapy, Susan was able to use the pronoun "I" and engage in simple conversational back-and-forth. Here is one of the conversations Curtiss recorded:

```
(A = adult; G = Genie)
```

A: Do you want me to play the piano for you a little bit?

G: Long time.

A: How's the neck?

G: Feel better.

A: I told you it would feel better when you got to school.

G: Hurt.

866

867

868

869

871

872

873

874

876

877

878

881

883

887

888

889

890

891

893

894

895

900

A: It hurts? I thought it felt better.

G: Little hurt.

A: How should I reach it?

G: Get ladder.

A: Why aren't you singing?

G: Very sad.

A: Why are you feeling sad?

G: Lisa sick.

A: How many sides does a triangle have?

G: Three.

### 64 G. Comstock

A: How many sides does a circle have?

G: Round.

(Curtiss, 1981)

Notice that Susan's responses are all one or two words, and always in the present tense. Are her temporal horizons confined to the "minute" present? It would seem so. She is clearly aware of the passing of time, and of the fact that time comes in units of variable length. If this were not true we could not offer a decent interpretation of her "long time" response to the piano playing offer. Nevertheless, there is no evidence here of episodic memory or use of tenses. Whatever narrative structure is present must be inferred from the context, context provided by the questions proffered by Curtiss. Wiley has the ability to learn new words and skills but she does not, for all we know, have episodic memories she can manipulate that extend more than a few dozen minutes into the past. Despite years of specialized therapy, she would never attain the linguistic competence of a three-year-old, the kind of competence required to begin narratively to constitute oneself.

We come now to a third case. Clive Wearing (born 1938) is a British former choir director and pianist who, having contracted herpesviral encephalitis in 1985, suffered profound declines in cognitive function. Mr. Wearing retains procedural, implicit, memories for playing the piano and singing. However, he lacks almost all episodic memories, unable to remember his wife's name or even the flavor of the food he is in the act of swallowing. He cannot consciously plan his behaviors for more than a few seconds into the future nor remember what he is thinking seconds prior to his being prompted. Suffering from total anterograde and severe retrograde amnesia, Mr. Wearing lives, as Oliver Sacks put it, entirely in the present (Sacks, 2007).

What does it feel like to be Brooke, Susan, or Clive Wearing? First, it feels like something. Theirs are not mental states like JD's which, to be precise, are no mental states at all. Second, each individual faces different circumstances and no doubt has different feelings from the other two. We must be sensitive to these differences. Third, each one feels, at their best, intensely happy. They feel the way we feel when we are most joyful,

when we are giddy to be alive, fully present and content in the moment. They feel, at their worst, the way we feel when we are suicidally depressed, desiring death now to whatever the future would bring were we forced against our will to endure it. As Clive Wearing's wife, Deborah, puts it in her memoir:

It was as if every waking moment was the first waking moment. Clive was under the constant impression that he had just emerged from unconsciousness because he had no evidence in his own mind of ever being awake before... "I haven't heard anything, seen anything, touched anything, smelled anything," he would say. "It's like being dead." (Wearing, 2006)

Wearing's memory, if we believe him, as I think we must, extends no further than a minute or two into the past. He frequently reports being in a living hell in which he has no memories at all, as if he has just come out of a devastating coma.

On the other hand, far-persons feel at their best the immense satisfactions of consuming a great meal or drowsing off into napping bliss. After eating, if a far-person senses that a companion may be hungry, they may communicate the location of food with warm, low pitched grunts. Satiated, they may relay their sense of ease and contentment to familiars by laying down, or making other invitational body movements, welcoming trusted friendly faces to stretch out beside them.

I call these nonnarrative experiences lyrical because they do not involve what Aristotle called the two central elements of narrative: plot, the temporal arrangement of episodes, and character, the place of personal agency in connecting the causes and effects of actions (Aristotle, 1997). All of the value of lyrical experience is packed into the present moment and none of it derives from the subject's knowledge of the distant past or anticipation of the distant future. Neither does it depend on the subject's being able to mind read. Since lyrical experience can be intense, it can be fully informed by the immediate past and directive with respect to the immediate future. Here is the way Oliver Sacks describes the value of Clive Wearing's music making. When Wearing plays or sings, he "is not, in the usual sense, remembering at all... [he is] wholly in the present" (Sacks, 2007).

Lyrical experiences have natural sounds and scenes as their objects. In such experiences, the present moment "fills consciousness entirely." The present, not joined to the distant past or future, has no characters in it, no plot to it, and can be absolute bliss or pure terror.

Here are three humans who may be *far-persons*, sentient moral patients with extremely attenuated temporal bounds, each living, as it were, with a past of no more than a few hours and a future of no more than a few dozen minutes. They have procedural memories encoded in habits that allow them to follow familiar melodies and move their bodies and fingers in rhythm. Perhaps they will have a lucid, vibrant musical experience in the morning in which they help to produce the melodies using piano "know-how" skills. But the experiences will be evanescent, not available to them for recall later that evening. Hours later, they will not "know-that" they had the earlier pleasure, will not be able to reflect upon their know-how or draw on their memory to inspire them to try to plan a way to have similar experiences in the future.

Far-person experience is lyrical but not autonoetic. While far-persons are aware of pleasures and pains they cannot assess these experiences, recognize that they have not had as many pleasurable musical experiences as they would wish, or regret that the past week has been one of unyielding anxiety. Neither can they form beliefs about, much less specific plans for, the future in the hope, perhaps, that it will bring stimulating days.

If the foregoing analysis is correct, there is no reason to think that you and I have not had, or at least could have, lyrical experiences that are exactly the same as the experiences of human far-persons. Can we then claim that our lyrical experiences are exactly the same as those of *nonhuman* far-persons? I can see no philosophical impediment to our reaching this conclusion. So, how does Informed feel when she evades her companion and buys herself a few moments of solitude with her food? She feels exactly the same way Susan Wiley might feel were she pursuing a similar goal: initial curiosity about whether she can successfully deceive her companion, surprise upon learning that she has achieved the ruse, peace upon her awareness that she can luxuriate in a slower paced meal. On the other hand,

when confronted with an animal whose face she does not recognize, Informed may feel exactly the same sort of anxiety, fear, or anger that Susan might feel under similar circumstances. Informed may vocalize her displeasure, try to scare the stranger away with desperate high pitched screams. Once either far-person has eaten her fill, she may enjoy communicating the location of the food to her mate with low pitched warm grunts. After she has eaten her fill, she may look forward to lying down with her mate, making it clear that she welcomes nuzzling and grooming. And she may envision herself, dozens of seconds hence, stretched out beside a familiar.

### 3.8 The Moral Status of Far-Persons

When Jenny in the London zoo is getting herself under control and beginning to look past her frustrations, she may well realize that she has it within herself to stop crying. If she does, she exercises the same self-control we praise in our two-year-olds. When Oreo is satisfied with the shape of her nest in the barn and content that she has done what she can with the design, she is enjoying the kind of pleasure we appreciate in two-year-olds making forts out of blankets in the living room. When Informed figures out that Uninformed is watching her and schemes to mislead her, she is exhibiting the kind of cleverness and forethought we admire in our pre-kindergarteners. When a calf skips down a chute having improved the speed of her puzzle solving, she is showing a satisfaction in her ability to learn that we hope to see in our toddlers (Hagen & Broom, 2004).

To the extent that all lyrical experiences can be thought of as the satisfactions of desires, they display a common trait. There is a phenomenal state the subject is in, that state is oriented toward the future, and for the subject's current desire to be satisfied, others must not interfere with the subject. To the extent that these desires are harmless to those potentially affected by them, moral agents should adopt rules that protect the individuals with these desires. In Hare's and Varner's two-level utilitarian theory, this special status is expressed in the

104

1045

105

1052

1054

1053

1058

1062

106

1068

1073

1074

1077

1079

deontological language of moral rights. As a negative right to liberty entails as a condition of its satisfaction a negative right to life, far-persons in two-level utilitarianism possess both a right to life and to freedom. Exactly what scope and strength such rights have, and how and when they may be over-ridden, is a complex matter for another day (see McMahan, 2002; Singer, 1993; Varner, 2012, 1998).

We have no evidence to date that pigs have a robust autonoetic consciousness. But we do have evidence that they are more than merely sentient. Varner writes that "having autonoetic consciousness doesn't give one a biographical sense of self and make one a person, [and yet] good ILS rules will incorporate some kind of special respect for near-persons" (Varner, 2012). Similarly, having lyrical experiences doesn't give one a robust autonoetic sense of self and make one a near-person, and yet good ILS rules will incorporate some kind of special consideration for farpersons. Such special consideration must recognize that probably all mammals are far-persons insofar as they are subjects of a life of lyrical experience. Because lyrical experiences are good in themselves, we should adopt ILS rules that, all else equal, prohibit raising, killing, and eating mammals. Such rules would also establish a strong presumption that, extraordinary circumstances aside, harming mammals in scientific research is also seriously wrong. The everyday rules must be formulated to help us form habits of respect for quasi-persons' ILS rights to life and liberty.

## 3.9 Conclusion

Darwin's suggestion, that orangutans have minds like children's minds, may be true not only of the great apes but of all mammals. Pigs, for example, use concepts, understand words, sulk, and respond emotionally to admonishments. They can learn to deceive others, to defer acting on their immediate desires, and form hypotheses that require several minutes of sustained action to achieve the desired end. As a representative of the class of nonprimate nonhuman mammals, pigs probably lack robust autonoetic consciousness but this fact, if it is a fact, does not mean their experiences have no overlap with human experiences. For at least some

pigs' experiences seem *exactly like* at least some experiences of children. Exactly like them because while it is true that pigs lack the potential to develop into persons, children with radical congenital cognitive limitations lack that potential, too. The purpose of this chapter has not been to mount a full defense of this claim. It has been more modest, to extend Darwin's claim from the great apes to all mammals while providing some evidence that all mammals are like humans in morally significant ways. I have argued that if we select the right target human experiences, namely, the lyrical experiences of human far-persons, then some mental states of some nonhuman mammals may be precisely like some of *our* mental states.

## **Bibliography**

- Akins, K., 1993. A Bat without Qualities. In M. Davies & G. W. Humphreys, eds., Consciousness: Psychological and Philosophical Essays. New York: Basil Blackwell.
- Aristotle, 1997. *Aristotle's Poetics*. McGill-Queen's Press McGill-Queen's University Press.
- Bateson, P., 2003. The Promise of Behavioural Biology. *Animal Behaviour*, **65**(1), pp. 11–17.
- Bethge, P., 2010. Brooke the Immortal: An American Child May Hold Secrets to Aging. Spiegel Online.
- Brown, B., 2009. Doctors Baffled, Intrigued by Girl Who Doesn't Age. 20/20.
- Carruthers, P., 2008. Meta-Cognition in Animals: A Skeptical Look. *Mind & Language*, **23**(1), pp. 58–89.
- Carruthers, P., 2011. The Opacity of Mind: An Integrative Theory of Self-Knowledge. Oxford: Oxford University Press.
- Comstock, G., 2009. Far-persons [WWW Document]. *OpenSeminar: On the Human*. URL: openseminar.org/hn/modules/44/index/screen.do
- Comstock, G., 2010. JD [unpublished manuscript]. Originally appeared in 2010 on *OpenSeminar: On the Human*. Raleigh, NC: North Carolina State University.
- Curtiss, S., 1977. *Genie: A Psycholinguistic Study of a Modern-Day "Wild Child"*. New York: Academic Press.
- Curtiss, S., 1981. Dissociations between Language and Cognition: Cases and Implications. *Journal of Autism Development Disorders*, **11**(1), pp. 15–30.

1126

1129

1134

1135

1136

114

1145

1152

- Darwin, C. & Barlow, N., 1946. Charles Darwin and the Voyage of the Beagle. New York: Philosophical Library. 1118
- Davidson, D., 2001. Rational Animals. In D. Davidson, Subjective, Intersubjective, 1119 Objective: Philosophical Essays, Vol. 3. Oxford: Oxford University Press. 1120
- de Waal, F. B. M., 1999. Anthropomorphism and Anthropodenial: 112 Consistency in Our Thinking about Humans and Other Animals. Philosophical Topics, 27(1), pp. 255–280. 1123
- Frankfurt, H. G., 1971. Freedom of the Will and the Concept of a Person. The 1124 *Journal of Philosophy*, **68**(1), pp. 5–20.
  - Frey, R. G., 1980. Interests and Rights: The Case against Animals. Oxford: Clarendon Press.
  - Fromkin, V., Krashen, S., Curtiss, S., Rigler, D. & Rigler, M., 1974. The Development of Language in Genie: A Case of Language Acquisition beyond the "Critical Period". Brain and Language, 1(1), pp. 81–107.
- Grandin, T., 2005. Animals in Translation: Using the Mysteries of Autism to 1130 Decode Animal Behavior. New York: Scribner. 113
- Griffiths, P., 1997. What Emotions really are: The Problem of Psychological Categories. Chicago: University of Chicago Press. 1133
  - Hagen, K. & Broom, D. M., 2004. Emotional reactions to learning in cattle. Applied Animal Behaviour Science, 85, pp. 203–213.
    - HeatherF27, 2007. Oreo Making a Nest, YouTube. URL: www.youtube.com/ watch?v=pTQHVJ10UrE
- Jack, R. E., Garrod, O. G. B. & Schyns, P. G., 2014. Dynamic Facial 1137 Expressions of Emotion Transmit an Evolving Hierarchy of Signals over Time. Current Biology, 24(2), pp. 187–192. 1139
- Karin-D'Arcy, M. R., 2005. The Modern Role of Morgan's Canon in 1140 Comparative Psychology. International Journal of Comparative Psychology, **18**(3), pp. 179–201. 1142
  - McMahan, I., 2002. The Ethics of Killing: Problems at the Margins of Life. Oxford: Oxford University Press.
    - Mendl, M., Held, S. & Byrne, R. W., 2010. Pig Cognition. Current Biology, **20**, pp. 796–798.
- 1146 Morgan, C. L., 1903. An Introduction to Comparative Psychology. 2<sup>nd</sup> Edition. 1147 London: Walter Scott.
- 1148 Nagel, T., 1974. What is it Like to Be a Bat?. Philosophical Review, 83(4), pp. 435-450.
- 1150 Patterson, F. G. P. & Cohn, R. H., 1994. Self-Recognition and Self-Awareness in Lowland Gorillas. In S. T. Parker, R. W. Mitchell & M. L. Boccia, eds., 1151

- Self-Awareness in Animals and Humans: Developmental Perspectives. Cambridge: Cambridge University Press.
- Sacks, O., 2007. The Abyss: A Neurologist's Notebook. *The New Yorker*, **83**(28), p. 100.

- Schechtman, M., 1996. *The Constitution of Selves*. Ithaca, NY: Cornell University Press.
- Seyfarth, R. M. & Cheney, D. L., 2012. Animal Cognition: Chimpanzee Alarm Calls Depend On What Others Know. *Current Biology*, **22**(2), pp. 51–52.
- Singer, P., 1993. *Practical Ethics*. 2<sup>nd</sup> Edition. Cambridge: Cambridge University Press.
- The Gorilla Foundation, Michael's Story. URL: www.koko.org/michaels-story
- Tulving, E., 1983. *Elements of Episodic Memory*. Oxford: Oxford University Press.
- Tulving, E., 1984. Précis of *Elements of Episodic Memory*. *Behavioral and Brain Sciences*, 7, pp. 223–268.
- Tulving, E., 2002. Episodic Memory: From Mind to Brain. *Annual Review of Psychology*, **53**, pp. 1–25.
- Varner, G. E., 1998. In Nature's Interests?: Interests, Animal Rights, and Environmental Ethics. New York: Oxford University Press.
- Varner, G. E., 2012. Personhood, Ethics, and Animal Cognition: Situating Animals in Hare's Two-Level Utilitarianism. Oxford: Oxford University Press.
- Walker, R. F., Pakula, L. C., Sutcliffe, M. J., Kruk, P. A., Graakjaer, J. & Shay, J. W., 2009. A Case Study of "Disorganized Development" and its Possible Relevance to Genetic Determinants of Aging. *Mechanisms of Ageing and Development*, **130**(5), pp. 350–356.
- Wearing, D., 2006. *Forever Today*. Unabridged Edition. Whitley Bay: Ulverscroft Large Print Books.

Gary Comstock, PhD, is professor of philosophy at North Carolina State University where he conducts research on ethical questions in the biological sciences. He is the author of Research Ethics: A Philosophical Guide to the Responsible Conduct of Research (Cambridge, 2013), Vexing Nature? On the Ethical Case Against Agricultural Biotechnology (Kluwer, 2000), and coeditor of The Moral Rights of Animals (Lexington, 2016).