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Abstract	near-persons, animals self," from the merely s class. Far-persons, he are able to travel men are conscious of and The animals in questic achieve their ends, ma pleasures and pains. E	omstock introduces the notion of far-persons. Following Gary Varner, Comstock distinguishes with a "robust autonoetic consciousness" but lacking an adult human's "biographical sense of sentient, those animals living "entirely in the present." Comstock notes the possibility of a third a argues, lack a biographical sense of self, possess a weak autonoetic consciousness, and tally through time a distance that exceeds the capacities of the merely sentient. Far-persons exercise control over short-term cognitive states, states limited by their temporal duration. In, human and nonhuman, consciously choose among various strategies available to them to aking them subjects of what Comstock calls lyrical experience: brief and potentially intense, But their ends expire minute-by-minute, not stretching beyond, Comstock says metaphorically, stock concludes by discussing the moral status of far-persons.							

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	Far-Persons	
	Gary Comstock	
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	At the London zoo] the keeper showed [Jenny, an orangutan] an apple,	
	ut would not give it her, whereupon she threw herself on her back,	
	icked & 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	
	awling & be a good girl, I will give you the apple."– She certainly	
	nderstood every word of this, &, though like a child, she had great	
	rork to stop whining, she at last succeeded, & then got the apple, with	
W	which she jumped into an arm chair & began eating it, with the most	
C	ontented countenance imaginable.	
	Charles Darwin, letter to Miss Susan Darwin, March 1838 (Darwin	&
E	Barlow, 1946)	
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3.1 Introduction: What's It Like to Be a Pig?

Is Darwin right? Is Jenny the orangutan "precisely like" a naughty child? 39 Can a nonhuman animal sulk, understand admonishments, and learn to 40 control her emotions? Some biologists (Bateson, 2003) and philosophers 41 (Griffiths, 1997) hypothesize that the behaviors of great apes have 42 homologies with the behaviors of Homo sapiens, but this seems not to 43 be Darwin's claim. Darwin's claim seems more radical: the mental, 44 experiential, states of the orangutan and the child are *the same*. Should 45 we believe Darwin about orangutans? And, if we should, what should we 46 think about the mental states of our so-called food animals? Intuitively, 47 Jenny seems to have more of what it takes to be a person than does, say, a 48 pig. Even if Darwin is right about orangutans-they are like children-49 what about hogs and cows? Are the nonhuman animals we eat like 50 children? 51

To answer these questions we must define persons, see to what extent 52 the great apes qualify, and ask to what extent other mammals qualify. 53 What are *persons*? Do *rights* attach only to persons? Might individuals 54 with less-than-personhood status deserve the special protections rights 55 afford? In his book, Personhood, Ethics, and Animal Cognition, Gary 56 Varner provides nuanced and scientifically informed answers to these 57 questions (Varner, 2012). I find his interpretations of the range and 58 diversity of nonhuman animal consciousness compelling and will lean 59 heavily on them in what follows. Varner understands and successfully 60 eludes the two main interpretive mistakes: anthropomorphism, or 61 ascribing human characteristics to nonhuman animals who lack them, 62 and anthropodenial (de Waal, 1999), not ascribing human characteris-63 tics to beings who have them.¹ 64

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 ⁶⁸ ¹ 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
 ⁶⁹ observed, reductive physicalist accounts of, say, bat consciousness may explain and predict bat
 ⁷⁰ 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
 ⁷¹ which we must triangulate three sources of information: systematic accounts of animal anatomical
 ⁷² 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 73 difficult to enter other mammals' minds if we select the right kinds of 74 human experiences as analogues. For nearly all humans have some of the 75 same experiences as some other mammals. As my test case of other 76 mammals I select pigs because they are the mammalian species slaugh-77 tered in the United States in the largest numbers.² I wager that if fair-78 minded observers come to understand what pig consciousness is like, 79 they will also come to acknowledge the rights not only of pigs but of all 80 individuals I call "far-persons." 81

It is beyond the scope of this chapter to mount a thorough defense of 82 my claim. Here, I will only describe what a human far-person is and 83 suggest that their mental states are a stepping stone to the mental states 84 of other animals. I agree with Temple Grandin, the Colorado State 85 University animal science professor, when she writes that humans with 86 mental limitations such as autism-a disorder with which she copes-87 are "a kind of way station on the road from animals to humans" 88 (Grandin, 2005). 89

3.2 Persons

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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.

 ¹⁰⁶ ² 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/

¹⁰⁸ resources/research/stats_slaughter_totals.html?referrer=https://www.google.com/

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).³

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 120 nonhuman animals have these capacities. He cautions us that not all of the 121 evidence is in yet, and that we should not be surprised if future scientific 122 discoveries cause us to change our minds. In the meantime, he continues, 123 there are reasons to be skeptical that any nonhuman animals will be found to 124 have "narrative self-constitution" (Schechtman, 1996). For being a person 125 means not only that I have desires and understand myself as having a story I 126 am living out in pursuit of those desires. It also means that I have desires 127 about my desires and understand myself to be crafting a story-my story-128 for myself. In this way I am not what Harry Frankfurt calls a "wanton," a 129 cognitively limited human being without preferences about one's preferences 130 and, so, no ability to rank them (Frankfurt, 1971). Unlike wantons, persons 131 care about what sort of person they are, and about what others think of 132 them. Persons perceive gaps between their present selves and their ideal 133 selves, and we occasionally try to elevate our wants and desires to match our 134 ideal wants and desires. 135

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

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 ³ 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.

Words can be used to name objects, and such nouns can in turn be 150 conjoined with verbs to form phrases. The order of the words can 151 be changed to change the meaning of the phrase, and new phrases can 152 be inserted into other phrases to form sentences. Sentences can be strung 153 together into narratives which invariably have plots. Without the ability 154 to think in plots, I arguably do not have sufficiently developed linguistic 155 tools to understand the nuanced interplay of temporal sequences 156 necessary for another capacity. The capacity to be a moral agent requires 157 that I understand the plot in which my decisions conflict with other 158 characters' decisions in scenes that involve our mutual entitlements and 159 responsibilities. Plots emerge when persons threaten each other and 160 when we must respond to such threats-cooperatively or agonistically. 161 Suppose, as seems true, that children take many years to acquire the 162 complex linguistic skills necessary for narrative self-constitution. 163 Suppose that only animals with large brains living in complex social 164 networks are capable of evolving to the point where language teachers 165 will devote years of their lives to developing the ability of the young 166 narratively to constitute themselves. If these are the facts about what it 167 takes to produce a person, it is unlikely that we will discover any 168 nonhuman animals outside the sphere of human culture with a biogra-169 phical sense of self. 170

So neither orangutans nor pigs, it seems, can be persons if persons 171 come into being only as individuals grasp the fact that other individuals 172 are, like them, conscious moral agents capable of shaping their own 173 biographies. For to grasp this fact, a person needs a theory of their own 174 mind that provides the story by which they form the desire to have 175 correct, just, right desires, desires that properly guide their treatment of 176 others. Persons are oriented, therefore, by the past, that is, by their 177 conscious memories of how they have acted, morally and immorally. 178 Such memories imbue a person's present with a valence that orients 179 them to the future. 180

Without a conscious past, an individual has no impetus. But without 181 a conscious future, one has no trajectory. If pigs have only procedural, 182 habitual, memories, they do not have the kinds of cognitive resources 183 necessary to understand where they are, psychologically speaking, much 184 less form a picture of where they want to go. If pigs do not consciously 185 remember where and when specific events occurred or what and why 186 they behaved in certain ways toward other pigs, they cannot access their 187 past in the way required to adjust their behaviors to their ideals in the 188 future. They cannot, if this account is correct, deliberate, for example, 189 about the implications of their past conflicts with other pigs. Nor can 190 they try out alternative hypotheses about how they should act toward an 191 agonistic conspecific in the future in order to rectify past wrongs or 192 prevent future trouble. If pigs lack episodic memory and executive 193 control of desires, they do not have the kind of agency necessary to 194 have a future of their own. 195

How would we know if a nonhuman animal were an autonomous 196 agent capable of reflecting on her past, examining her motives and 197 intentions, and making future decisions in line with her values and 198 ideals? Varner suggests some empirical measures; the mark test as a 199 way of assessing self-recognition, story-telling about one's past as a test 200 for episodic memory, caching food for future use as a sign of future 201 planning, and deception of conspecifics as a harbinger of theory of mind. 202 Before we look at the evidence in each of these areas, let us say a further 203 word about theory of mind, the ability to understand others' behaviors 204 as motivated by their mental states. 205

Having an understanding of my own mind goes hand in hand with 206 having a theory of others' minds, especially if the ability to understand 203 the behavior of others as motivated by *their* mental states is a corequisite 208 for understanding my own behavior as motivated by my mental states 200 (cf. Carruthers, 2011). If a person's life has a narrative trajectory that 210 gets its direction from conscious awareness of one's past and future, and 211 this self-conscious narrative trajectory is itself dependent upon under-212 standing the lives of others as having a similar narrative structure, then 213 the self-conscious capacity to think of oneself as a character in a story, 214 made possible by the mind-reading capacity to think of others as 215 characters in their stories, has important ethical implications. 216

The normative features of personhood arise with the appearance of 217 theory of mind. For the trajectory of a person's life is aimed by them at 218 goals they establish. It is the basis, too, of their personal understanding of 219 what a good life is for them. To this extent, we are in control of our own 220 behavior-or, at least, it certainly feels that we are. Whether we in fact 221 have free will is immaterial to the pain we feel when others interfere with 222 our plans or in other ways frustrate us in our pursuit of our goals. Being 223 bound physically or psychologically against our will is, all else equal, a 224 form of enslavement. Enslaving someone is prima facie wrong for many 225 reasons, including that it violates their autonomy. To live a good life, 226 agents who feel they are free should be allowed to think freely and to make 227 decisions for themselves. For when others seek to control my thoughts and 228 actions, they diminish my happiness and violate my right to liberty. 229

Individuals who do not experience the kind of freedom that comes 230 with a biographical sense of self cannot be disrespected in the same way 231 that persons can be disrespected. For if one never has the feeling of 232 freedom, how can one feel its loss? If pigs do not aspire to live according 233 to certain ideals the reason may be that they do not have the capacity to 234 exercise executive control over their behavior. If pigs cannot choose to 235 inhibit lesser desires in order to satisfy more important desires, they 236 cannot choose, either, to govern their behavior according to their ideals. 237 In sum, persons have a biographical sense of self. They are rational and 238 self-conscious, have desires about desires, and feel that they can act freely 239 as moral agents. The mental tools necessary to constitute oneself narra-240 tively are concepts and words, phrases, and propositions used to describe 241 good and bad characters and desirable and undesirable plots. Because 2.42 persons have the feelings of freedom, they are morally responsible for their 243 actions. For all of these reasons, persons are entitled to special protections. 2.44

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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

personal goals, and the feelings of being free to shape their narrative. 253 However, because they have a rich, deep sense of the recent past and 254 because they have procedural memories and facial recognition, they can 255 become conscious of themselves and others. They are capable of learning 256 how to perform new tasks, of taking pleasure in their successes in this area, 257 and capable of making plans for the intermediate future. By "intermediate 258 future" I mean, roughly, the rest of today and, a bit more precisely, a future 259 that stretches out as long as a few dozen minutes and perhaps a few hours, 260 but not beyond the onset of the next sleep-cycle. 261

Robust autonoetic consciousness requires that an individual possess 262 some of a person's cognitive capacities, including the ability to 263 understand concepts and to interpret others' bodily gestures and 264 vocalizations as meaningful signs, that is, words or directives. 265 Words are sounds emitted by a sender who uses the representation 266 to designate objects to a receiver. Directives are sounds used to 267 request or demand specific responses. Near-persons understand repre-268 sentation and causality. What they do not understand are proposi-269 tional attitudes, the linking of nouns and verbs to form grammatical 270 phrases. Grammar allows us to form novel propositions by doing 271 nothing more than recursively changing the order of words and 272 phrases. Recursion allows us to embed phrases within phrases, and 273 other phrases within those phrases-and so on, and so on-almost 274 without end. With words, phrases, and propositions, one can create 275 narrative plots full of characters enacting what Aristotle called 276 "drama." Plots, moral agency, and characters all become possible 277 with narrative, but only with narrative. Without plots and characters, 278 with only the lower-level cognitive resources of words and rudimen-279 tary grammar, the possibility of an animal narratively constituting 280 itself disappears. Only autonoetic consciousness remains. 281

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 289 nonhuman animals apparently lack a full-blown biographical sense of 290 self and are not characters, they need not have narrative in order to have 291 exactly the same semantic resources possessed by human near-persons. 292 When a vervet monkey vocally signals to another the presence of a 293 specific predator, such as a leopard (or eagle, or snake), the monkey is 294 using a word with pragmatic force (Seyfarth & Cheney, 2012). It is, 295 literally, issuing a warning using a word that, translated into English, 296 would be something like "leopard!" (or eagle! or snake!). 297

Some nonhuman animals also seem to perceive, understand, and 298 represent their bodies as their own and so to be self-conscious. 299 Individuals who pass the mark test (by wiping away a mark on 300 their face when seen in a mirror) seemingly must have a memory 301 of what their body looks like and the thought, "that image in the 302 mirror is my face." For if they see a strange mark on their forehead 303 and try to remove it, they must have not only a procedural, habitual 304 memory of how to wipe their forehead but an episodic memory as 305 well of how their face is supposed to appear. "My face is not 306 supposed to look like that face." And it would seem they must 307 further have some anticipation about how their face will look again 308 in the near-term future after they have wiped the mark away. "Soon 309 the image in the mirror will look like me again." 310

All of these claims about the capacities of some mammals (in this case, 311 great apes) are consistent with the claim those animals have a robust 312 proprioceptive sense of their bodies, an intermediate past, and an inter-313 mediate future. But these capacities are a far cry from propositional 314 knowledge, long-term temporal horizons extending beyond the next few 315 hours, executive control of one's behavior, narrative understanding and 316 creativity, and moral agency. A chimp may desire to wash her face now 317 but she does not want, for all we know, to clean up her social image 318 starting first thing next week. 319

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)

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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.)
- ³⁴⁶ K: WRONG BITE.
- ³⁴⁷ P: Why bite?
- ³⁴⁸ K: BECAUSE MAD.
- P: Why mad?
- 350 K: DON'T KNOW

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- (Patterson & Cohn, 1994, p.282)
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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.

But if Koko is not capable of expressing memories of events three days 367 in the past, she is able to communicate her emotions. When asked, 368 "How do you feel?" she will respond appropriately, for example, with 369 FINE, or HUNGRY, or SAD. In children, internal immediate-state 370 language reporting one's mood emerges in the third and fourth years. 371 We are on firm ground, then, in thinking Koko has words and concepts, 372 social communication, rationality in the sense of cause and effect think-373 ing, emotions, awareness, and beliefs and desires. But she does not seem 374 to have the second-order desires, executive control, or autonomy 375 required for a biographical sense of self. 376

Varner is similarly cautious about long-term memories allegedly 377 recounted by a gorilla, Michael, who was captured by poachers as an 378 infant. Patterson made a video of Michael allegedly recounting this 379 memory of the incident in which Michael's mother was killed. In the 380 recording we see Michael's signings rendered in the following captions 381 provided by Patterson: "SQUASH MEAT GORILLA. MOUTH 382 TOOTH. CRY SHARP-NOISE LOUD. BAD THINK-TROUBLE 383 LOCK-FACE. CUT/NECK LIP(GIRL) HOLD" (The Gorilla 384 Foundation, n.d.). Varner, noting the ambiguity of the string of words, 385 observes that "even Patterson's sympathetic co-author Eugene Linden 386 doubts her claim that Michael was telling the story about his mother's 387 death" (Ibid, pp.155–156). Varner concludes that in spite of such anec-388 dotes and Patterson's claim that Michael told her this story on several 380 occasions, there is "no good evidence that apes understand or use lan-390 guage to express thoughts about the non-immediate past" (Ibid, pp.156). 391 If Varner is wrong and Michael is recounting an episodic memory, 392 Michael has an important claim to personhood. If Varner is right, 393 perhaps Michael is just making signs he thinks Patterson is subcon-30/ sciously nudging him to make, perhaps in Clever Hans fashion. In that 395 event, Michael may not have episodic memories of the traumatic events. 396

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 399 the world around them. They learn from their experiences and are con-400 scious of events in the intermediate past. They can make plans concerning 40 the intermediate future. But they lack what persons have, a full-featured 402 biographical sense of self. Near-persons do not have second-order desires 403 about their desires, episodic memories, or plans for tomorrow. They do not 404 have a theory of mind, cannot tell others stories about themselves, and 405 cannot shape their lives in accordance with their values. 406

3.4 The Merely Sentient

Varner's "merely sentient" nonhuman animals are individuals who live 411 entirely in the moment. Attracted to favorable stimuli and repulsed from 412 aversive stimuli, the merely sentient are neither able to exercise control 413 over the external forces that move them around in the world nor are they 414 conscious of those forces. The merely sentient do not have emotions, 415 rationality, or a robust sense of the world around them. They do not 416 learn from their experiences, recognize the faces of conspecifics, or 417 engage in social communication. 418

Which nonhuman animals are merely sentient? Whether fish feel 419 pains and pleasures is a matter of some dispute but assuming that fish 420 are sentient, this capacity may be the full extent of their mental powers. 421 In his earlier book, In Nature's Interests?, Varner observes that fish fail 422 tests of conscious problem solving, such as multiple reversal trials, and 423 suggests that if they learn from memories at all they learn only implicitly 424 and subconsciously (Varner, 1998). If fish feel pain but have only the 425 vaguest sense of immediate past events and an even less explicit and 42.6 shorter view of the future, fish are merely sentient. 427

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

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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)

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Squirrels, Varner claims, do not plan for the future, have episodic mem-437 ories, narrative autobiographies, or theory of mind. They are not persons. 438 But neither, Varner surmises, are they near-persons because there is no 439 evidence that they recognize themselves in mirrors, have personally 440 indexed memories, or plan for the future. They have implicit memories 441 and implicit anticipations, but these capacities are not sufficient to form 442 conscious plans for the future. A squirrel hoarding acorns consciously 443 desires "to get each acorn into its stash" but "is completely unconscious of 444 the purpose of its hoarding behavior" (Ibid, p.164). Since, Varner con-445 tinues, the squirrel is not aware of the reason for its behavior, or of the 446 long-term benefits of stashing, the animal consequently: 447

...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*)

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Varner allows that the squirrel can "achieve a sense of satisfaction" from 454 getting an acorn into her stash. Squirrels have simple desires ("get this 455 acorn into that hole") and simple beliefs about cause and effect ("drop-456 ping this object into that gash will get this acorn into that hole"). But 457 Varner does not allow, nor does it seem true, that the squirrel can get 458 satisfaction from having put in an honest day's labor, as it were. If the 459 squirrel does not possess the intermediate-level concepts of "a day's 460 work" or "the cold season"-much less the higher-level concepts and 461 grammar necessary to form propositions ("If I fail to put in a sufficient 462 number of good days of work I will run out of acorns and face 463 catastrophe in the cold season to come")-the squirrel cannot have the 464 narrative knowledge required to constitute herself as a subject who 465 endures across a series of temporally discrete events. Given what we 166 now know about squirrels, it seems right to say that they are not capable 467 of the kind of experiences had by Jenny and Koko. 468

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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 480 autonoetic consciousness in any nonhumans other than the candidates 481 for near-personhood, such evidence may be forthcoming as we become 482 more skilled at testing for the target capacities. Meanwhile, he points 483 out, we must make policies regarding the so-called food animals. He 484 suggests that we adopt what he calls the "Rumsfeld response," namely, 485 that we do the best we can, forming regulations based on the evidence 486 we have rather than the evidence we wish we had. By implication, then, 48' since there are only two categories available, near-persons and merely 488 sentient, Varner's framework would categorize pigs as merely sentient. 489 At least for the moment, And, at least for the moment, this under-490 standing of pig consciousness would allow the killing of pigs for food 491 since the value of a pig would, in Peter Singer's word, be replaceable 492 (Singer, 1993). As long as one merely sentient animal is brought into the 493 world every time one like it is dispatched, overall value is conserved. 494

Varner does not claim that pigs are merely sentient, but he finds no 495 experimental evidence to date that pigs pass the mark test, attribute false 496 beliefs to conspecifics, communicate to each other about their plans, and 407 so on. A positive case for the conclusion that pigs are merely sentient and 498 replaceable can be found in the kinds of arguments made by Donald 499 Davidson and R. G. Frey, arguments that coincide with Varner's 500 assumptions about squirrels, that the animals lack intermediate- and 501 higher-level concepts such as "a day's work," "the young ones to be born 502 tomorrow," and "putting in a good day's work preparing for the births 503 to come" (Davidson, 2001; Frey, 1980). If pigs lack intermediate-level 504

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.

Why can't she take such pleasure? Because her implicit memories and 511 implicit anticipations are neither temporally extended in the way 512 required nor is she capable of hooking them consciously together into 513 a narrative. Neither are they pegged by the pig to herself. Consider a 514 free-range sow, Oreo, building her nest (HeatherF27, 2007). Oreo 515 apparently does not consciously plan for the future birth of her offspring 516 even as she aims to get this mouthful of straw into the place she thinks it 517 ought to go. For she is not conscious of the purpose of her movements in 518 serially taking mouthful after mouthful of straw and placing them in a 519 large pile. If this is the right description of how it feels to be a pig making 520 a nest, as I believe it is, the sow is conscious of goals she aims to achieve 521 in the next few dozen minutes but not conscious of any overarching goal 522 she may achieve by successfully completing a series of such acts. Oreo 523 can achieve satisfaction from successful completion of the proper place-524 ment of this mouthful of straw but not from successful completion of 525 behaviors we would call, were they performed by a woman, maternal 526 activities in preparation for tomorrow's births. To paraphrase Varner, a 527 sow cannot, in effect, say, "There, I've accomplished that!" since that 528 (the goal of preparing a warm nest in preparation for partuition) is 529 something of which the sow is not conscious (cf. Varner, 2012, 530 p.164). If all of this is correct, how it feels to be a squirrel or pig 531 would be the same as how it feels to be a fish. 532

But is this correct? Isn't the nest building behavior itself evidence that 533 Oreo has intermediate-term beliefs and desires? For it is essential to our 534 description of her behavior that she is building a *nest*, an activity that 535 takes hours to complete. Given her behavior, mustn't we allow that the 536 sow has temporal horizons of a sufficient length and complexity to 537 achieve this end? Her fussing with various configurations of the straw, 538 hour after hour, strongly suggests she is making judgments about how 539 well she is achieving the overall end. She does not serially grasp mouthful 540

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 547 is pregnant; there is a reason for her behavior. Second, she pursues 548 her straw moving behavior all morning. Third, she is free to stop and 549 start as she wishes; she is neither playing around aimlessly nor 550 anxiously pacing stereotypically. Fourth, she does not cease what 551 she is doing until a structure sufficient to warm her coming offspring 552 is in place. The evidence is that Oreo has in mind a project that will 553 take her many minutes, perhaps hours, to finish. And this is evidence 554 that points to an important difference between porcine and fish 555 consciousness. I can think of no clearer way to put the difference 556 than in temporal terms. Whereas the "temporal window" of some 557 fish is, according to some observers, confined to a few seconds, the 558 temporal window of the pig stretches out for many minutes, perhaps 559 as far as an hour. At the beginning of her work, Oreo initiates a 560 project that she cannot accomplish now. And to make good decisions 561 about which step to take next, she must represent what she has built 562 so that she can compare it with the image of what she intends to 563 build. The structure she foresees will require for its completion 564 dozens of minutes of activity on her part, activity of which she is 565 conscious. Or so the evidence would suggest. 566

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

The researchers discovered something else. After several iterations of 582 the trial, Informed began to exhibit behaviors suggesting that she was 583 reading Uninformed's mind. Upon entering the arena, Informed resisted 584 the impulse to head straight for the food. She took a meandering path 585 and did not head straightaway for the bucket. Was she trying to throw 586 off her heavier mate? There is no other plausible explanation. Whereas 587 Informed would initially go straight to the food, soon she began secretive 588 maneuvers. She'd move first behind a barrier and, keeping a steady eye 589 on her mate, wait until Uninformed was out of sight. She would then, 590 and only then, dart for the food. 591

Does Informed have the discriminative ability to see the world from 592 Uninformed's perspective? Are her deceptive movements' evidence that 503 she can shift her point of view to another pig's point of view? Clearly 594 Informed is inquisitive and attentive, conscious of her surroundings, and 595 able to learn the locations of objects. But she may also be suppressing a 596 strong desire to eat believing that doing so will allow her, in the long 597 run, to get more food. If this is what she is doing, then Informed is 598 consciously foreseeing the future, traveling mentally forward in time, 599 imagining herself alone at the trough. She is also rank ordering her 600 preferences, exercising executive control of the desires on which she 601 chooses to act. If she has these capacities, she may be thinking the 602 equivalent of "I must move my body over in this direction, watch for 603 my opportunity, and then run quickly to the bucket." And if she has 604 these capacities, she is capable of seeing two possible future scenarios-605 one in which she is alone with the reward, one in which she is accom-606 panied by Uninformed. She is also capable of consciously choosing the 607 future scenario she most desires, and she is capable of purposely con-608 trolling her emotions in order to achieve it. On this interpretation, 609 Informed has the abilities to form hypotheses about how to achieve 610 her goals, consciously to decide on the path she thinks most likely to 611 help her achieve her chosen end, rank order her preferences, read 612

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 conclu-615 sion. While we might understand a person's analogous behavior as 616 motivated by the kinds of cognitive states just described, we have 617 little evidence at present to think that Informed has the ability to 618 understand other pigs' behaviors as motivated by mental states. In 619 the absence of such evidence, the anthropomorphizing dimensions of 620 the interpretation are unwarranted. If we assume Morgan's Canon, 621 as we should, we must prefer simpler, lower-level explanations over 622 more complicated explanations. The rule is only to attribute addi-623 tional, higher-level, second-order psychological capacities when no 624 sufficient lower-level explanations are available (Karin-D'Arcy, 2005; 625 Morgan, 1903). However, in the food-seeking behavior, one can 626 explain the pig's movements in terms of first-order weak and strong 627 beliefs and desires (Carruthers, 2008). For Informed has two con-628 flicting desires: a desire to eat now while sharing with a mate, and a 629 stronger desire to eat later while not sharing with a mate. Informed 630 has two consistent beliefs: a strong belief that if she runs directly to 631 the food she will have to share it, and a strong belief that if she first 632 deceives her mate she will not have to share it. So, given her beliefs 633 and her strongest desire, she acts on the stronger desire. 634

We need not attribute a theory of mind to Informed to explain her 635 behaviors because her behaviors can each be explained in terms of 636 "world-directed" beliefs. World-directed beliefs are beliefs about objects 63 in the world as opposed to subject-directed beliefs, which are beliefs 638 about subjects-other minds or persons. Nor need we postulate that 639 Informed has the capacity for executive control of her preferences 640 because the first-order, world-directed interpretation just offered will 641 suffice to explain her movements. Informed forms one association over 642 the course of several trials that if food is in location X and no other pigs 643 are in the arena, the best course of action is *Y*, to run straight to the food. 644 She forms a second association that if food is in location X and other pigs 645 are in the arena, the best course of action is Z, to meander away from the 646 food, to monitor the other pig's location and when its head is positioned 64 in a certain way, to run straight to the food. If so, Uninformed's 648

⁶⁴⁹ behavior is causally determined by whichever set of environmental⁶⁵⁰ conditions obtains.

A deflationary interpretation of Informed's behavior inspired by 651 Morgan's Canon undermines the claim that she has all of the psycho-652 logical capacities of a near-person. But it does not undermine the claim 653 that she has some of a near-person's cognitive skills. To the contrary, it is 654 accurate to say that Informed *feels* hungry, *desires* to try to lose her mate, 655 and believes that moving away from the food will buy her precious 656 competitor-free seconds at the trough. While the sow does not have 657 robust autonoetic consciousness, however, she has more than mere 658 sentience. She is able to formulate hypotheses, hold them in mind, 659 and choose among them. She is able to defer acting on immediate 660 desires to make possible the satisfaction of longer-term desires. 661

With respect to its duration, mammalian consciousness is unlike fish 662 consciousness. First, unlike fish, pigs and squirrels have conceptual repre-663 sentations of objects such as acorns and sheaves of straw. Second, they have 664 the short-term projects of getting this acorn into her stash and placing this 665 sheaf of straw in an advantageous position. Third, they can recognize faces 666 and respond to others. They have basic social emotions such as happiness 667 and sadness. Fourth, they have basic communicative mechanisms they can 668 consciously deploy to alert and inform conspecifics of dangers and oppor-669 tunities. Fifth, they can use their communicative mechanisms to deceive 670 others. Sixth, they can learn to maximize rewards by systematically mirror-671 ing the choice that was rewarded on the just-completed trial (Varner, 672 1998). As these capacities are not available to the merely sentient, we 673 need a new category to represent these nonhuman animals. 674

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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 691 anticipations. They do require the ability to become habituated to new 692 circumstances, to learn new skills, and to develop novel beliefs and 693 desires based on implicit memories. On the basis of such unconscious 694 psychological capacities, individuals can form conscious hypotheses and 695 set goals for the short-term future. Lyrical experiences are laden with 696 value and often involve the so-called four basic emotions: happiness, 697 sadness, anger, and fear or surprise (Jack, et al., 2014). Finally, lyrical 698 experiences involve awareness of one's achievement; far-persons can take 699 pride in their successes and be frustrated by their failures. 700

Like near-persons, far-persons are sentient and conscious. They have 701 beliefs, desires, and emotions. They understand causal relations and can 702 reason about the best ways to achieve their objectives. They have a point of 703 view; they can remember the faces of their conspecifics and what those 704 conspecifics were doing a minute or two ago. However, unlike near - persons, 705 far-persons lack a robust autonoetic consciousness. They cannot see their 706 bodies from another's perspective, do not have desires about their desires, and 707 lack temporal horizons stretching beyond the present hour or two. 708

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.

⁷¹⁴ Before we proceed I must clarify an important issue. Far-persons are ⁷¹⁵ not non-persons.⁴ *Non-persons* are nonconscious organisms whose

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⁴ I depart here from the way Varner uses this term. He uses "non-persons" to describe any ⁷¹⁹ individual who is not a person. I use it, instead, to refer more narrowly to that set of sentient ⁷²⁰ individuals that lack consciousness altogether and, therefore, any traits of far-persons.

autonomic systems maintain homeostasis and respond to environ-721 mental changes by moving toward attractive stimuli and away from 722 aversive stimuli. Non-persons may be sentient but their lack of 723 consciousness means that their pains and pleasures are not accessible 724 to them. There is, in short, no "them" there, as it were, no central 725 information gathering and processing system to integrate across time 726 the organism's mental states, if it has any. Non-persons, as I say, 727 may or may not be sentient, but they utterly lack concepts, words, 728 beliefs, desires, and emotions. Their ability to respond to environ-729 mental signals is to be explained as blind movement determined by 730 physical forces. Humans who exist from birth to death in perma-731 nently vegetative states are non-persons for, apart from their physical 732 resemblance to us, they are not recognizable as the kind of beings we 733 are. 734

Allow me one example. JD was born in 1959 unable to swallow, 735 move, or vocalize. By her twenty-third birthday she had made no 736 progress. She lay in bed, permanently comatose until she died at age 737 27. She learned one lesson when the nurses who cared for her 738 decided to train her to signal them when she eliminated urine or 739 feces. Under their tutelage, JD "learned" to squeeze a button when 740 she was wet. Apart from this one accomplishment, however, JD 741 showed no signs of habituation, procedural memory, or short-term 742 desires. She never reached out to others, spoke, or held objects. She 743 did not swallow when prompted, cry when poked, or laugh when 744 tickled. She did not try to adjust herself in bed, turn away from light 745 or toward a voice. She did not try to make the room temperature 746 warmer or cooler. The nurses who trained her to signal them when 747 she needed changing did not regard her button-pushing movements 748 as conscious or intentional. Rather, they thought of them as 749 Pavlovian automatic reflexes, conditioned responses to a stimulus. 750 JD died in 1986 of complications related to pneumonia, never 751 having exhibited any of the most rudimentary signs of being a far-752 person (Comstock, 2009, 2010). Apparently, human organisms can 753 exist for decades not only without becoming far-persons but without 754 ever having the potential to become one. 755

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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 777 condition diagnosed only as "Syndrome X." She died at twenty years old, 778 never having weighed more than sixteen pounds or having attained the 779 mental capacities of more than a one-year-old (Walker, et al., 2009). The 780 seventeen-year-old Brooke recognized family members and demonstrated 78 object constancy by, for example, tracking the dress she preferred when her 782 mother would playfully hide it behind another dress. She enjoyed watching 783 television with her sisters, gave appropriate if child-like responses to their 784 simple commands and requests, and vocalized her displeasure at faces and 785 events that displeased her (Bethge, 2010). She produced few sounds, if any, 786 recognizable as words (Brown, 2009), but could vocally express to others 783 an emotional repertoire that included affection, fear, and anger. 78

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

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3 Far-Persons

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 834 locked in her bedroom by her father from the time she was twenty months 835 old until she was freed at thirteen years of age. Let us try to go inside the 836 confined girl's head. She is, at the moment, responding to her brother, 837 whom she trusts. He has poked his head in her door because he has a new 838 toy for her. How does she feel? She recognizes her brother's face and 839 distinguishes it both from her father's face and from her mother's face. 840 Her brother puts her at ease. She is able to track the hand that contains the 841 toy as he hides it playfully behind his back. It has been a few minutes. She 842 has heard her neighbor practicing piano, pleasant sounds that compete 843 with the songs of a waxwing that also waft through her open window. She 844 gives appropriate if child-like responses to her brother's whispered assur-845 ances that her having the toy will be ok with Father. Clearly she is capable 846 of fear, anxiety, anger, and affection. She can understand that words 847 express speakers' intentions and that words can be used pragmatically to 848 issue assertions, requests, promises, and warnings. When freed, she will 849 understand a dozen or so words (e.g., mother, father, door, bunny), and 850 react appropriately when they are used to refer to their objects. However, 851 she will only be able to generate and verbalize two ideas, each idea 852 pronounced as a single word, "/stäpit/" and "/nomôr/." She will not be 853 able to learn to use grammar to string words together into sentences, use 854 phrases recursively, or tell stories (Brown, 2009). 855

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 second-872 order desires, the ability to form propositions, and the capacity to 873 understand or produce narratives. She did not use the first-person 874 pronoun and, in the judgment of Susan Curtiss, a sympathetic 875 researcher who probably knew Susan Wiley better than anyone else, 876 Wiley probably did not have a concept of herself when she was found 877 (Curtiss, 1981, 1977; Fromkin, et al., 1974). After years of intensive 878 language therapy, Susan was able to use the pronoun "I" and engage in 879 simple conversational back-and-forth. Here is one of the conversations 880 Curtiss recorded: 881

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(A = adult; G = Genie)

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- 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.
- A: It hurts? I thought it felt better.
- G: Little hurt.
- ⁸⁹² A: How should I reach it?
- ⁸⁹³ G: Get ladder.
- ⁸⁹⁴ A: Why aren't you singing?
- ⁸⁹⁵ G: Very sad.
- ⁸⁹⁶ A: Why are you feeling sad?
- ⁸⁹⁷ G: Lisa sick.
- A: How many sides does a triangle have?
- G: Three.

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A: How many sides does a circle have?

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902 G: Round.
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(Curtiss, 1981)

Notice that Susan's responses are all one or two words, and always in 906 the present tense. Are her temporal horizons confined to the "minute" 907 present? It would seem so. She is clearly aware of the passing of time, 908 and of the fact that time comes in units of variable length. If this were 909 not true we could not offer a decent interpretation of her "long time" 910 response to the piano playing offer. Nevertheless, there is no evidence 911 here of episodic memory or use of tenses. Whatever narrative structure 912 is present must be inferred from the context, context provided by the 913 questions proffered by Curtiss. Wiley has the ability to learn new words 914 and skills but she does not, for all we know, have episodic memories 915 she can manipulate that extend more than a few dozen minutes into 916 the past. Despite years of specialized therapy, she would never attain 917 the linguistic competence of a three-year-old, the kind of competence 918 required to begin narratively to constitute oneself. 919

We come now to a third case. Clive Wearing (born 1938) is a British 920 former choir director and pianist who, having contracted herpesviral 921 encephalitis in 1985, suffered profound declines in cognitive function. 922 Mr. Wearing retains procedural, implicit, memories for playing the 923 piano and singing. However, he lacks almost all episodic memories, 924 unable to remember his wife's name or even the flavor of the food he is 925 in the act of swallowing. He cannot consciously plan his behaviors for 926 more than a few seconds into the future nor remember what he is 923 thinking seconds prior to his being prompted. Suffering from total 928 anterograde and severe retrograde amnesia, Mr. Wearing lives, as 020 Oliver Sacks put it, entirely in the present (Sacks, 2007). 930

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:

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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)

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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 960 involve what Aristotle called the two central elements of narrative: 961 plot, the temporal arrangement of episodes, and character, the place of 962 personal agency in connecting the causes and effects of actions (Aristotle, 963 1997). All of the value of lyrical experience is packed into the present 964 moment and none of it derives from the subject's knowledge of the 965 distant past or anticipation of the distant future. Neither does it depend 966 on the subject's being able to mind read. Since lyrical experience can be 967 intense, it can be fully informed by the immediate past and directive 968 with respect to the immediate future. Here is the way Oliver Sacks 969 describes the value of Clive Wearing's music making. When Wearing 970 plays or sings, he "is not, in the usual sense, remembering at all . . . [he is] 971 wholly in the present" (Sacks, 2007). 972

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 977 patients with extremely attenuated temporal bounds, each living, as it 978 were, with a past of no more than a few hours and a future of no more 979 than a few dozen minutes. They have procedural memories encoded in 980 habits that allow them to follow familiar melodies and move their 981 bodies and fingers in rhythm. Perhaps they will have a lucid, vibrant 982 musical experience in the morning in which they help to produce the 983 melodies using piano "know-how" skills. But the experiences will be 984 evanescent, not available to them for recall later that evening. Hours 985 later, they will not "know-that" they had the earlier pleasure, will not 986 be able to reflect upon their know-how or draw on their memory to 98' inspire them to try to plan a way to have similar experiences in the 988 future. 989

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 997 you and I have not had, or at least could have, lyrical experiences 998 that are exactly the same as the experiences of human far-persons. 999 Can we then claim that our lyrical experiences are exactly the same 1000 as those of nonhuman far-persons? I can see no philosophical impe-1001 diment to our reaching this conclusion. So, how does Informed feel 1002 when she evades her companion and buys herself a few moments of 1003 solitude with her food? She feels exactly the same way Susan Wiley 1004 might feel were she pursuing a similar goal: initial curiosity about 1005 whether she can successfully deceive her companion, surprise upon 1006 learning that she has achieved the ruse, peace upon her awareness 1007 that she can luxuriate in a slower paced meal. On the other hand, 1008

when confronted with an animal whose face she does not recognize, 1009 Informed may feel exactly the same sort of anxiety, fear, or anger 1010 that Susan might feel under similar circumstances. Informed may 1011 vocalize her displeasure, try to scare the stranger away with desperate 1012 high pitched screams. Once either far-person has eaten her fill, she 1013 may enjoy communicating the location of the food to her mate with 1014 low pitched warm grunts. After she has eaten her fill, she may look 1015 forward to lying down with her mate, making it clear that she 1016 welcomes nuzzling and grooming. And she may envision herself, 1017 dozens of seconds hence, stretched out beside a familiar. 1018

3.8 The Moral Status of Far-Persons

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When Jenny in the London zoo is getting herself under control and 1024 beginning to look past her frustrations, she may well realize that she has 1025 it within herself to stop crying. If she does, she exercises the same self-1026 control we praise in our two-year-olds. When Oreo is satisfied with the 1027 shape of her nest in the barn and content that she has done what she can 1028 with the design, she is enjoying the kind of pleasure we appreciate in 1029 two-year-olds making forts out of blankets in the living room. When 1030 Informed figures out that Uninformed is watching her and schemes to 1031 mislead her, she is exhibiting the kind of cleverness and forethought we 1032 admire in our pre-kindergarteners. When a calf skips down a chute 1033 having improved the speed of her puzzle solving, she is showing a 1034 satisfaction in her ability to learn that we hope to see in our toddlers 1035 (Hagen & Broom, 2004). 1036

To the extent that all lyrical experiences can be thought of as the 1037 satisfactions of desires, they display a common trait. There is a phenom-1038 enal state the subject is in, that state is oriented toward the future, and 1039 for the subject's current desire to be satisfied, others must not interfere 1040 with the subject. To the extent that these desires are harmless to 1041 those potentially affected by them, moral agents should adopt rules 1042 that protect the individuals with these desires. In Hare's and Varner's 1043 two-level utilitarian theory, this special status is expressed in the 1044

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 105 consciousness. But we do have evidence that they are more than merely 1052 sentient. Varner writes that "having autonoetic consciousness doesn't give 105 one a biographical sense of self and make one a *person*, [and yet] good ILS 1054 rules will incorporate some kind of special respect for near-persons" 105 (Varner, 2012). Similarly, having lyrical experiences doesn't give one a 1056 robust autonoetic sense of self and make one a near-person, and yet good 1057 ILS rules will incorporate some kind of special consideration for far-105 persons. Such special consideration must recognize that probably all mam-1059 mals are far-persons insofar as they are subjects of a life of lyrical experi-1060 ence. Because lyrical experiences are good in themselves, we should adopt 106 ILS rules that, all else equal, prohibit raising, killing, and eating mammals. 1062 Such rules would also establish a strong presumption that, extraordinary 106 circumstances aside, harming mammals in scientific research is also ser-1064 iously wrong. The everyday rules must be formulated to help us form 1065 habits of respect for quasi-persons' ILS rights to life and liberty. 1066

3.9 Conclusion

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Darwin's suggestion, that orangutans have minds like children's minds, 1072 may be true not only of the great apes but of all mammals. Pigs, for 1073 example, use concepts, understand words, sulk, and respond emotionally 1074 to admonishments. They can learn to deceive others, to defer acting on 107 their immediate desires, and form hypotheses that require several minutes 1076 of sustained action to achieve the desired end. As a representative of the 1073 class of nonprimate nonhuman mammals, pigs probably lack robust 1075 autonoetic consciousness but this fact, if it is a fact, does not mean their 1079 experiences have no overlap with human experiences. For at least some 1080

pigs' experiences seem *exactly like* at least some experiences of children. 1081 Exactly like them because while it is true that pigs lack the potential to 1082 develop into persons, children with radical congenital cognitive limita-1083 tions lack that potential, too. The purpose of this chapter has not been 1084 to mount a full defense of this claim. It has been more modest, to extend 1085 Darwin's claim from the great apes to all mammals while providing 1086 some evidence that all mammals are like humans in morally significant 1087 ways. I have argued that if we select the right target human experiences, 1088 namely, the lyrical experiences of human far-persons, then some mental 1089 states of some nonhuman mammals may be precisely like some of our 1090 mental states. 1091

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