

1 **The Animal Ethics of Temple Grandin: A Protectionist Analysis**

2 **Introduction**

3 **Uncorrected author's proof.**

4 Temple Grandin is well known as a representative of both people with
5 autism and of the meat industry. She rose to prominence through the work of
6 Oliver Sacks, whose 1995 book, *An Anthropologist on Mars*, was named after a
7 phrase Grandin used to describe her life as a person with autism in a non-
8 autistic world, one that contains social and emotional cues she finds difficult
9 to decipher. Grandin has since gone on to become a bestselling author in her
10 own right, and writings by and about her highlight her career as a designer of
11 humane slaughterhouses. In both her popular books as well as over 100 peer-
12 reviewed articles she has published as an animal scientist, Grandin frequently
13 addresses issues related to the ethical status of animals, and makes arguments
14 to the effect that when animals are killed in her system the result is ethically
15 superior not only to traditional slaughter but also to vegan agriculture.

16 Systems designed by Grandin have long handled over half the cattle killed
17 for food in Canada and the United States (Grandin 2001: 103). Facilities she
18 designed are also located in Europe, Asia, Australia and South America.
19 Chances are good that readers of this work who eat meat will have consumed
20 beef, pork or chicken processed according to Grandin's method at least once.
21 As for Grandin's ethical ideas as they pertain to animals, they have been
22 disseminated by CNN, NBC and the BBC, not to mention every major
23 newspaper in the English-speaking world.¹ In terms of her industrial impact

¹ For a small sampling of Grandin's electronic media coverage see Grandin 2009c. Typing Grandin's name into the Factiva newspaper database calls up over 1,600 articles from across the English-speaking world.

24 and audience, Grandin is one of the world's most influential voices on animal
25 issues.

26 In spite of Grandin's prominence, animal ethicists have taken little interest
27 in her work.² Although the ethics of killing and eating animals that are killed
28 painlessly has been extensively analysed, the discussion to date has been at an
29 abstract level, with little attention to the question of whether or to what
30 degree existing systems such as Grandin's have eliminated pain from the
31 slaughter process (e.g. Singer 1993; Višak 2013). Similarly, Grandin's writings
32 frequently defend omnivorism as superior to vegetarianism or veganism.
33 Given the size of her audience, these arguments are among the most widely
34 read arguments, pro or con, on the ethics of eating meat. As such the need to
35 analyze them also is overdue.

36 What follows is an attempt to bring animal protection theory to bear on
37 Grandin's work, in her capacity both as a designer of slaughter facilities and
38 as an advocate for omnivorism. Animal protection is a better term for what is
39 often termed animal rights, given that many of the theories grouped under
40 the animal rights label do not extend the concept of rights to animals (e.g.
41 Singer 1990, McMahan 2002). Animal protection thus is an umbrella term for
42 theories such as those of Singer, Regan (2004), McMahan and Cochrane
43 (2012). Despite their differences, such theories eschew speciesism and grant
44 equal moral weight to the interest animals have in avoiding suffering relative
45 to the similar interest of human beings. With the exception of Singer, who
46 argues that it is permissible to kill merely sentient animals so long as they are

² Gary Francione and Jeff McMahan are among the few animal theorists to comment on Grandin. See the brief discussions in Francione 1996: 99-100, 199-202, and 2008: 74-5 and McMahan 2002: 200-03. Peter Singer discusses lobbying efforts to persuade McDonald's to hire Grandin in Singer 1998: 166-77. I have not been able to find any scholarly discussion of Grandin's defence of meat-eating.

47 replaced, all such theorists call into question the practice of systematically
48 killing animals when nutritious plant-based alternative are widely available.
49 My analysis endorses these two widely held views in the animal protection
50 literature regarding animal suffering. As such it seeks to be ecumenical across
51 such approaches by appealing to ideas they all agree on, with the exception of
52 Singer's outlier view on the replaceability of merely sentient beings (Singer
53 2011: 94-122).³

54 I outline the nature of Grandin's system of humane slaughter as it
55 pertains to cattle. I focus on her cattle system because it is the one she has
56 devoted the most time and energy to developing and is the system with
57 which she has long been most identified.⁴ I then outline four arguments
58 Grandin has made defending meat-eating. Two of these arguments appeal to
59 evolutionary considerations while a third posits the fact that we cannot but
60 help grant moral significance to membership in the species *Homo sapiens*,
61 which inevitably entails a lower moral status for livestock and other animals.
62 Grandin's fourth and final argument maintains that when the slaughter
63 process is performed correctly it yields moral insights of a kind not attainable
64 through the cultivation of plant food. On a protection-based approach, I
65 argue, Grandin's system of slaughter is superior to its traditional counterpart.
66 Grandin's success as a designer of humane slaughterhouses however is not
67 matched by any corresponding success in offering a moral defence of meat-
68 eating. Despite, or perhaps because of, the popularity of her work, Grandin's
69 arguments for continuing to eat animals are noteworthy only in how
70 disappointing and rudimentary they are. If we can thank Grandin for making

³ For critical discussion of Singer's view on killing animals see Višak (2013: 46-70).

⁴ For an analysis of Grandin's system of slaughter for chicken see Chapter Five of Lamey (2019).

71 a difference in the lives of millions of farm animals, her work can also be
72 criticized for not engaging the moral status of animals with the depth and
73 rigor that the issue deserves.

74 **Grandin's Method of Slaughter**

75 Grandin has written that much of her success in working with animals
76 comes from the fact that "I see all kinds of connections between their behavior
77 and certain autistic behaviors" (2006a: 172).⁵ She gives the example of
78 responses to high-pitched noise. Just as someone whistling in the middle of
79 the night will cause her heart to race more than it would that of a non-autistic
80 person, animals are easily startled by noises such as a bell or the sudden hiss
81 of an air brake (2006a: 169). Grandin's system therefore not only minimizes
82 high-pitch sounds that animals can hear, it also eliminates many visual details
83 that loom large from an animal's point of view. In the case of cows for
84 example, an entire herd can stop if it comes across a swinging chain, which
85 will cause the lead cow to move its head back and forth with its swing.
86 Similarly, strong visual contrasts such as shadows, light reflecting in a puddle
87 or a drain running across the animals' path will cause balking. Even
88 something as seemingly minor as a styrofoam cup on the ground or a piece of
89 cloth flapping in the wind can cause a herd to freeze up (2006a: 167-8).
90 Grandin's system meticulously avoids all such distractions that can cause the
91 animals to stop moving.

⁵ Karen Davis has challenged Grandin's claim that her system of slaughter is inspired by her autism. "Many of the problems Grandin presents herself as uniquely spotting in the slaughterhouse environment are the kinds of things that an intelligent non-autistic sees on entering an inbred culture" (Davis 2005: 1). Grandin's emphasis on a link between autism and animal behaviour is noticeably more pronounced in her popular books than in her academic writings and may sometimes be slightly exaggerated. However, I am more inclined to accept it than Davis is. Among other reasons, there have been cases of other autistic people identifying strongly with animal behaviours (e.g. Price-Hughes 2004).

92

93 *Image One: A Curved Handling Chute*



94

95 At a structural level, one of the most distinctive features of a plant
96 designed by Grandin is its curved handling chute, which is located between
97 the holding pens and the slaughter facility proper. The chute's design
98 principles are rooted in animal behaviour research (Grandin 2003). This is
99 evident in the fact that the chute has solid walls. The location of a cow's eyes
100 on the sides of its head gives it almost 360° panoramic vision, but only when
101 looking ahead does it have binocular eyesight. The lack of depth perception to
102 the side or rear means that even distant objects in those directions can appear
103 to be within the animal's flight zone. Solid walls in the chute eliminate the
104 possibility of the animal seeing people or other distractions outside of the
105 facility that might startle them (Grandin 1983a: 2).

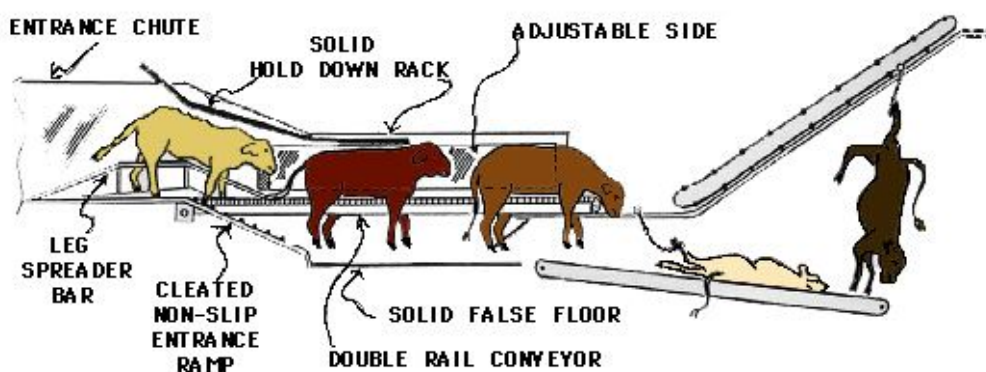
106 The curvature in the chute follows a similar logic. It is more efficient than
107 a straight chute as the cows cannot see people or moving objects up ahead,
108 which can cause them to balk. Cattle will also not enter a chute that bends too
109 sharply, which to them appears to be a dead end. In Grandin's system the
110 degree of curvature allows entering cows to see at least two body lengths
111 ahead. In nature cows will move in a circle to keep an eye on possible

112 predators and both the curve in the chute and the single-file width exploit this
113 natural tendency (Grandin 2002b). The end result is that rather than plant
114 personnel having to force a herd through the chute, most cows will willingly
115 walk through on their own.

116 People with autism often experience anxiety and panic attacks,
117 particularly in unfamiliar situations. Grandin was able to diminish her
118 anxiety by building a so-called Squeeze Box, a device which she lies in to have
119 even pressure applied to both sides of her body, an experience which many
120 autistic people find soothing. Grandin's Squeeze Box, which is now sold
121 commercially, was inspired by an animal husbandry device known as a
122 squeeze chute, which is used during vaccination and other procedures in
123 which an animal needs to be immobilized. Grandin's slaughter system in turn
124 employs a device partly inspired by her Squeeze Box, which is known as a
125 conveyor restrainer. It is what is waiting for the animals at the end of the
126 handling chute after they enter the slaughterhouse, where they are
127 immediately immobilized in a low-stress manner.

128

129 *Image Two: The Conveyor Restrainer*



130

131 As image two illustrates, a leg-spreader bar and false floor position the
132 animals so that as they step forward their weight shifts onto a conveyor belt.

133 The walls of the conveyor restrainer are again solid, but unlike the handling
134 chute they apply pressure to the animal's body, firmly enough to keep the
135 animal in place, but not so hard as to cause gouging. The absence of noise and
136 the experience of motion in an upright position have a calming effect on the
137 animal, as does the presence of other animals, particularly when they are
138 close enough to touch each other and are all from the same herd. A rack
139 above the animal's head prevents lunging by eliminating the sight of people
140 and other threatening figures deep inside its flight zone. In a beef plant the
141 conveyor belt is additionally shaped so as to fit a bull's brisket. As the animal
142 moves forward it is brought to the stunning platform where a plant employee
143 is waiting with a captive bolt stunner. The stunner operator positions the gun-
144 like tool on the animal's forehead to fire a bolt into its brain, a procedure
145 which when properly performed instantly knocks the animal unconscious,
146 thereby resulting in a painless method of death (Grandin: 1995: 1, 2009a: 1).⁶

147 Elements such as the handling chute and the conveyor restrainer illustrate
148 the technical details of Grandin's system. Yet Grandin has often stressed that
149 the most important element of her system is not any mechanical aspect, but
150 the way it is used. As she puts it, "the best equipment in the world is
151 worthless unless management controls the behavior of plant employees"
152 (2006a: 175). A key aspect of her system therefore involves plant audits.
153 Unannounced inspectors record the success rate of various procedures
154 throughout the animals' time inside a facility. In a beef plant for example
155 auditors observe the slaughter of set number of cows, such as 50, 100 or 1,000,

⁶ Grandin has separate guidelines for electric stunning, a potentially painless method used on pigs and sheep, and ritual slaughter methods (kosher and halaal) that prohibit stunning and require placing the animals in a head-immobilizing device before its throat is slit. See respectively Grandin (2008) and Grandin and Regenstein (1994).

156 and record what percentage of them are instantly rendered insensible with
157 one shot of the bolt gun, marking employee performance according to the
158 following criteria:

159

160 Excellent = 99 to 100 per cent of animals killed with one shot

161 Acceptable = 95 to 98 per cent of animals killed with one shot

162 Not acceptable = 90 to 94 per cent of animals killed with one shot

163 Serious problem = under 90 per cent of animals killed with one shot

164

165 Other audited criteria include the number of animals that slip, fall or
166 vocalize while inside the facility, how many are still conscious when they
167 reach the bleed rail and the rate at which employees use cattle prods, with use
168 on up to 25 per cent of processed animals rated acceptable. If an employee
169 commits a wilful act of abuse, such as hitting an animal or applying a prod to
170 its rectum or other sensitive area, it is grounds for automatic audit failure.

171 Publicly available summaries of audits conducted between 2007 and 2015
172 indicate a total of 187 audits performed at unidentified beef facilities (Grandin
173 2018). Of these 172 audits (92 per cent) resulted in a pass, often with very high
174 scores: 137 audits (74 per cent) recorded 99 to 100 per cent of cattle being
175 successfully stunned with one shot of the captive bolt gun. Fourteen audits
176 resulted in failure and two required a re-audit following a corrective action
177 letter. Grounds for failure ranged from cutting off the leg of a conscious cow
178 to touching a cow with a cattle prod on a sensitive part of its body. Plants
179 were re-audited when more than two per cent of cows fell during live
180 handling or more than five per cent vocalized during handling and stunning.
181 Such scores are broadly representative of how most plants have performed

182 since Grandin's program was adopted at the turn of the century (Singer: 1998:
183 166-77). Plants that incorporate Grandin's technology and auditing method
184 generally score highly.

185 Grandin has frequently framed the appeal of her system in economic
186 terms. Animals that go through her system have been measured to have the
187 same level of the stress hormone cortisol as they do when undergoing
188 vaccination (Grandin 1998). They also receive fewer bruises than at traditional
189 slaughter plants (Grandin 2000). These and other factors increase the value of
190 the animal's carcass, factors which Grandin frequently cites to suggest that a
191 humane system is a more profitable one (Grandin 1983*b*, 2000, 2009*b*).

192 **Grandin's Arguments for Omnivorism**

193 Grandin's writings offer an ethical rationale for her system of slaughter.
194 That rationale is one that recognizes animals' interest in avoiding suffering,
195 but stops short of advocating a plant-based diet. "Often I get asked if am a
196 vegetarian," she has written. "I eat meat, because I believed that a totally
197 vegan diet, in which all animal products are eliminated, is unnatural" (2006*a*:
198 235). Grandin's writings present a series of arguments to the effect that her
199 system is superior not only to traditional slaughter, but that eating meat is
200 superior to veganism, on grounds that appeal not only to "naturalness" but
201 more purely normative concerns. Fully assessing Grandin's animal ethic
202 therefore requires examining the justifications for the superiority of meat-
203 eating that she has put forward.

204 Grandin's most sophisticated argument does not originate with her.
205 Rather she credits an argument made by Stephen Budiansky that "had a
206 profound effect on [her] thinking" regarding animals (2006*a*: 235). Budiansky
207 offers a coevolutionary defence of meat-eating. Coevolution occurs when one

208 species triggers evolutionary change in another. In Budiansky's view, this
209 principle explains the rise of modern agriculture, which is not merely the
210 creation of human beings but, in a real sense, is the creation of domesticated
211 animal as well. Such a view is inspired by the work of anthropologist David
212 Rindos, who has put forward a co-evolutionary explanation for plant
213 domestication (Rindos 1984). Budiansky innovates on Rindos not only by
214 extending his theory to animal domestication, but by invoking it as an
215 argument against veganism. According to Budiansky, were we to attempt to
216 abolish meat farming, we would be turning our back on the metaphoric
217 equivalent of a moral contract between human beings and domesticated
218 animals, one that benefits not only us but also the animals (Budiansky 1999).

219 Coevolution is known to occur in nature with symbiotic species.
220 Budiansky gives the example of an African species of melon that only grows
221 outside the tunnels of aardvarks (1999: 84). The aardvarks eat the melons and,
222 through their toilet habits, plant the melons' seeds in fertile mounds. Unlike
223 all other wild cucurbits (the species to which melons belong) the variety eaten
224 by aardvarks do not contain a bitter toxin. This increases the reproductive
225 fitness of the melons, as they are able to reproduce by having their seeds
226 distributed by the aardvarks. The aardvarks have access to a safe and
227 abundant water supply, and so benefit from sharing a habitat with melons.
228 Thus although the aardvarks have a greater influence on the evolutionary
229 history of the melons than vice versa, both species benefit from the
230 relationship (1999: 84).

231 On Budiansky's account something similar has happened between human
232 beings and food animals. He asks us to imagine the original contact between
233 human beings and members of the species that eventually became

234 domesticated. Such contact occurred over 9,000 years ago, shortly after the
235 end of an ice age. During periods of climactic upheaval, many species of
236 mammals and birds would have undergone a process known as neoteny,
237 whereby traits associated with juvenile members of a species are retained into
238 adulthood. "All young mammals and birds," Budiansky writes, "show a
239 curiosity about their surroundings, an ability to learn new things, a lack of
240 fear of new situations, and even a nondiscriminating willingness to associate
241 and play with members of other species," (1999: 77-8). Adults that retained
242 such juvenile characteristics would have increased their reproductive fitness
243 during an ice age, as they would have been more likely to seek out and
244 inhabit new territories after their original habitats were iced over. Given that
245 such animals would have come in contact with human beings soon after, they
246 would have increased their reproductive fitness in a second way, in that their
247 more curious and gentler nature would have allowed them to occupy what
248 was in effect a new habitat, the human sphere of domestication.

249 Budiansky invokes the concept of preadaptation to summarize the initial
250 contact between humans and domesticated species (1989: 5). Preadaptation is
251 misunderstood if it is taken to imply an intentional or teleological process of
252 change. It rather refers to a process whereby an adaptation or other trait that
253 evolved to perform one function is used for a new, potentially unrelated
254 function. In this case, curiosity and other traits helpful in seeking out new
255 natural habitats preadapted sheep, cows, horses pigs and chickens to be
256 suitable for domestication. The process of change in the animals would only
257 have continued after domestication began, as domesticated animals
258 increasingly took on docility and other characteristics that separated them
259 from their wild counterparts. The result thousands of years later is that food

260 animals are now adapted to occupy the ecological niche that is human
261 agriculture.

262 For Budiansky, the evolutionary history of domesticated animals creates
263 an onus on us to continue raising them for food. This is because
264 domestication is not a purely cultural process. Cultural matters we regard as
265 subject to our control. Budiansky gives the example of someone saying that
266 we should not abolish nuclear weapons on the grounds that they are the
267 natural product of evolution. Such a person would fail to adequately
268 distinguish culture from nature (1999: 163). With regard to food animals
269 however, their genetic character and behavior “is arguably much more the
270 product of evolution in its truest sense, something that is not subordinate to
271 human consciousness. The fate of these species was dictated by nature more
272 than by man’s cultural institutions” (1999: 164). Were veganism to become
273 popular, it would represent an abandonment of our ethical responsibilities to
274 the animals whose destiny we now find intertwined with our own. Or as
275 Budiansky puts it in the article that first caught Grandin’s eye, “we now have
276 no choice but to care for animals that as a result of thousands of years of
277 evolution are genetically programmed to depend on us” (1989: 5).

278 Grandin takes over from Budiansky the notion that food animals benefit
279 from our consumption of them. One benefit they gain is an ability to
280 reproduce in large numbers. With almost a billion cattle in the world, there is
281 no danger of them going extinct any time soon (Statista 2018). But another
282 thing animals gain from agriculture is a more merciful death than they would
283 experience in the wild. Starvation, exposure, being torn apart by another
284 animal: against this backdrop, being knocked unconscious and killed with a
285 bolt through the brain would seem the far better option (Grandin 2006a: 235).

286 Grandin's second argument makes a separate appeal to evolution.
287 Grandin has noted that she once tried vegetarianism and found that it made
288 her physically ill. She suggests that people with autism and similar conditions
289 may be physically unable to live on a meat-free diet. People with conditions
290 such as autism are of course only a small portion of the population, and
291 Grandin does not invoke her experience as a justification for universal meat-
292 eating. Instead she speculates on a possible genetic link between being autistic
293 and having a metabolism that requires eating meat, a speculation which in
294 turn leads her to offer an evolutionary justification of meat eating that does
295 apply to the general population:

296 [U]ntil someone proves otherwise I'm operating from the
297 hypothesis that at least some people [such as people with
298 autism] are genetically built so that they have to have meat
299 to function. Even if that's not so, the fact that humans
300 evolved as both plant and meat eaters means that the vast
301 majority of human beings are going to continue to eat both.
302 Humans are animals, too, and we do what our animal
303 natures tell us to do. (Grandin and Johnson 2005: 180).
304
305

306 This is Grandin's second evolutionary argument against plant-based diets.
307 Whether or not people with autism have a special need for meat, she
308 suggests, it is a fact about our species that we evolved as omnivores.
309 Veganism is thus not as natural as meat-eating. Ethicists who advocate meat-
310 free diets may do so due to an interest in animals, but in an important sense,
311 they overlook our own needs as animals.

312 A third argument Grandin has offered to justify omnivorism over
313 veganism involves a different appeal to biology. It occurs when Grandin
314 grapples with the question of why a human being and an animal with similar
315 cognitive abilities should occupy different moral statuses. Grandin uses the
316 example of a cow and a mentally handicapped child with the same level of

317 cognitive development. It is perfectly acceptable to sell or kill the cow, she
318 notes, but forbidden to do the same to a handicapped child. Grandin asks
319 why the handicapped child or human newborn should have more protection
320 than the bovine (2002a: 2). This of course is a question that frequently occurs
321 in the debate over the ethical status of animals, in which the standard
322 approach is to think of the handicapped child or newborn as an orphan (in
323 order to focus on his or her direct moral worth, rather than indirect status
324 acquired through relationships with others).

325 Grandin does not attempt to give a complete answer to this question. She
326 notes that there are arguments for and against assigning moral significance to
327 species-membership that she does not deal with. Grandin does however offer
328 one reason for the different moral status of cognitively disabled child and cow
329 that a complete answer will presumably have to take into account. It is that
330 species membership is something we cannot *help* but grant strong moral
331 weight to. As with her first evolutionary argument, this is a claim by Grandin
332 that again highlights our animal identity. "Why should [a] retarded child or
333 human newborn have more protection than a cow?," Grandin asks. "One
334 reason is that the child is our own species and we protect our own species.
335 Even lions do not usually dine on lion for dinner . . . there is an instinct to
336 protect one's own kind" (2002a: 2). Thus for Grandin there is something
337 illusory about the thought that we might disregard species membership as a
338 moral category. The moral significance of being *Homo sapiens* is something
339 moral theory can seek to explain but not overcome.

340 Grandin's final argument against veganism is inspired by her work in
341 religious slaughterhouses. According to Grandin, slaughterhouse employees
342 can be divided into three different categories. The first are those who adopt a

343 mechanical approach. They become desensitised to their work, and kill
344 animals with the same rote indifference with which they might staple boxes
345 moving along a conveyor belt (1988: 119). The second group are sadists. They
346 begin to enjoy killing and deliberately torture the animals, justifying their
347 actions with rationales such as “it is going to die in five minutes so it does not
348 matter how I treat it” (1988: 120). The third and far superior approach sees
349 killing as part of a sacred ritual. This understanding, which Grandin
350 commonly observes in Jewish and Muslim slaughterhouses, exhibits respect
351 for the animals and approaches slaughter within a ritualised framework, one
352 that places limits on the act of killing and prevents it from spiralling out of
353 control (1988: 121).

354 Grandin has frequently drawn parallels between her slaughter system and
355 the sacred ritual approach. She has for example described personal rituals she
356 observes in and around non-religious slaughterhouses, such as bowing before
357 entry, as well as religious experiences she has had during the killing process
358 (1988: xx, 2006a: 230). Grandin’s religious understanding of slaughter draws
359 of a wide range of sources, from traditional theism to sacrificial practices in
360 Pagan Greece to popular accounts of the Eastern notion of Karma. But in
361 general, two ideas pervade her discussion of sacred rituals. One is that the
362 moment of slaughter can make us aware of a larger cosmic order (2006a: 229-
363 30). The second is that killing is a type of therapeutic release for the
364 slaughterer: encountering death makes us more appreciative of life (2006a:
365 229). The first of these ideas could potentially be embraced by members of a
366 wide variety of religious traditions, while the second could in principle be
367 embraced by a non-believer. Taken together, both notions suggest that

368 appropriately conducted slaughter can generate moral knowledge of a kind
369 not generated in the cultivation of plant food.

370

371 **Criticism**

372 What are we to make of Grandin and her unique contribution to modern
373 agriculture? As a feat of engineering, her system of slaughter combines
374 technical ingenuity and insight into animal behaviour. Grandin's design is
375 based on empathetic insight into animal perception. Whether or not one
376 thinks the empathetic element extends far enough should not stand in the
377 way of recognizing that Grandin's system represents a progressive step
378 against the backdrop of traditional agriculture.

379 Grandin's system however has gaps and limitations. One is that Grandin's
380 system allows more painful killing than is formally permitted by U.S. law.
381 The 1958 Humane Methods of Slaughter Act legally requires that all pigs and
382 cows killed for food be unconscious at the time of death. That the law was
383 never enforced explains how Grandin's system could represent an
384 improvement over what came before (Jones 2008). Grandin however
385 maintains that a 100 per cent painless kill rate is not possible. As a
386 government report Grandin was involved with put it, "Dr. Grandin believes
387 that effectively stunning animals on the first try 100 per cent of the time is
388 unachievable—that is why she proposed an objective scoring method as an
389 alternative" (GAO 2004: 18; Grandin 2006*b*: 133).

390 This is an important point that is often overlooked. Painless slaughter was
391 thought for several decades to be an appropriate standard to aim for from the
392 ideal point of view. It remains in principle, if not at the level of enforcement,
393 the standard of American law. Grandin, who may have a more detailed grasp

394 of industrial slaughter than anyone else alive, urges that we accept the
395 inevitability of suffering as part of animal slaughter. As much as her system
396 seeks to reduce suffering in practice, therefore, at an ideal level it
397 simultaneously represents a greater tolerance of animal suffering. This is
398 because of the five per cent of painful animals deaths Grandin considers
399 acceptable. As one NGO report pointed out, “[e]ven if 100 per cent of
400 slaughter plants were able to meet [Grandin’s] standards, it would mean that
401 185 million chickens, 1.8 million cattle and sheep and one million pigs may be
402 killed inhumanely each year in the United States” (Jones 2008: 86). Grandin’s
403 method ultimately confirms something critics of industrialized animal killing
404 have long maintained. Suffering is an inescapable part of the process.⁷

405 Food animals can live for years but typically only spend a few hours at a
406 slaughter facility. Grandin’s system does not address many forms of suffering
407 that can take place prior to slaughter. These forms include practices such as
408 castration, branding, animal fighting and intensive confinement. Grandin’s
409 guidelines also say nothing about what an animal is fed prior to slaughter or
410 issues having to do with the manipulation of an animal’s size and body
411 structure. Grandin notes that it is now common for dairy cows to be bred at
412 such a size their feet can no longer support their bodyweight (Grandin 2001:
413 107). Grandin’s approach, which does not implement welfare regulations that
414 require economic sacrifice, does not address such issues.

415 Grandin’s system finally is designed to reduce animal suffering but not
416 animal killing. This is a limitation, for two reasons. First, it seems plausible to

⁷ Grandin’s system also currently does not involve any labelling program. This means that unless one eats only meat from McDonald’s, Burger King or other restaurant chains whose suppliers employ Grandin’s system, there is no way for consumers to know when they are buying meat from animals killed in one of Grandin’s facilities.

417 grant some moral weight to the interest of at least vertebrate animals in
418 continued existence. Imagine a sick dog or cat that will die unless we give it
419 an injection (McMahan 2008: 67). Suppose that the animal's ailment, while it
420 will end the animal's life, will cause it no pain. If we were to give the animal a
421 shot we would be causing it some pain for the sake of extending its life. It
422 seems intuitive to think that a certain amount of pain from the injection
423 would be justified if it extended the animal's life by some non-trivial amount.
424 If so then from a non-speciesist, and thus protectionist, point of view, it is
425 reasonable to grant at least some moral weight to the interests that cows and
426 pigs have in continued existence, an interest Grandin's system does not
427 recognize. The second reason why Grandin's concern with reducing suffering
428 but not killing is a limitation is that it has an absurd implication. Such a view
429 suggests that we should painlessly kill dogs, cats and other animals so as to
430 avoid the possibility of them suffering (McMahan 2002: 201). If they have an
431 interest only in avoiding suffering and not living, we spare them suffering
432 while depriving them of nothing of value by painlessly killing them as soon
433 as possible. This outcome however is at odds with the intuition that no wrong
434 is done when animals are allowed to live relatively pain-free lives.

435 These considerations should be born in mind when humane slaughter is
436 put forward as an alternative to veganism at an idea level. The fact that
437 humane slaughter does not completely eliminate acts of suffering during
438 slaughter; does not address significant suffering that occurs before slaughter;
439 and does not recognize farm animals' legitimate interest in not being killed,
440 all suggest that it is not an ideal outcome for farm animals when such an ideal
441 is informed by a philosophy of animal protection.

442 However, for all that animal suffering remains a legitimate subject of
443 concern in facilities audited by Grandin, it is likely to be a far greater concern
444 in plants that do not even attempt to follow her guidelines. If it seems
445 unlikely that Grandin's system has taken all suffering out of animal slaughter,
446 it seems equally unlikely that it has made no difference either. The handling
447 chutes and other elements that reduce an animal's stress in its final hours are
448 improvements over previous slaughter systems which did nothing to reduce
449 the terror animals experienced immediately before death. For this reason,
450 pointing out problems with Grandin's approach at an ideal level should not
451 be taken to show that nothing is gained when plants adopt her approach.

452 On an ethical level, Grandin's system encourages slaughterhouse
453 operators to give moral weight to the issue of animal suffering. In this way it
454 shares an important commitment with animal protection theory. All else
455 being equal, it is better for an animal to be killed in a manner recommended
456 by Grandin than it would be for it to die according to a method of slaughter
457 which gave no weight to the animal's suffering, such as killing it with a
458 sledgehammer, an approach still used in parts of the developing world.
459 Although sledgehammers have not been used in American slaughterhouses
460 since the 1950s, slaughter continued to be carried out with little regard for the
461 animals' welfare long after this time (Singer 1990, Warrick 2001). Grandin's
462 system has raised awareness regarding food animal welfare and reduced their
463 suffering. Despite its flaws at an ideal level, in the non-ideal world we
464 actually inhabit, Grandin's method of slaughter has been a force for good. If it
465 is not as good as embracing veganism, its superiority over traditional
466 slaughter is still worth recognizing.

467 Some proponents of protection theory might dispute this verdict, on the
468 grounds that Grandin’s system actually makes life worse for animals than
469 traditional slaughter. Programs such as Grandin’s, for example, “are
470 commonly cited by agribusiness during legislative deliberations and used to
471 argue that it is not necessary to pass legislation to prevent cruel farming
472 practices” (Farm Sanctuary 2005: 3). This raises the possibility that more
473 rigorous legal protection for farm animals might exist but for the rise of
474 humane slaughter. By the same standard, the existence of Grandin’s system
475 might cause some people to continue to eat meat, and so participate in the
476 wrong of killing animals, who would have otherwise eschewed meat had
477 traditional slaughter remained the norm.

478 In response to this objection, it bears noting that resisting regulatory
479 change is a failing of the agribusiness industry, not Grandin’s system itself.
480 There is no contradiction in viewing Grandin’s system of slaughter as better
481 than traditional slaughter and also favouring increased regulatory protection
482 for animals. Indeed, there is no contradiction between ranking humane
483 slaughter better than inhumane slaughter but second best to vegan
484 agriculture. It also seems to underestimate the intellectual creativity of the
485 agribusiness sector to think that if Grandin’s system did not exist, its
486 representatives would be unable to find some other rationale for opposing
487 greater regulation.

488 As for people who would have stopped eating meat, I am unaware of
489 anyone who actually falls into this category, and the concern that some such
490 people may exist would seem speculative. Suppose however we grant that
491 some such people do exist. The objection would still only be worth heeding if
492 they were above a trivial number. Meta-analysis of survey data obtained

493 between the mid-1990s and 2018 suggests that between two and six per cent
494 of the American public identify as vegetarians. A significant portion of this
495 group however also report “eating meat when asked to list everything they
496 ate during two non-consecutive 24-hour periods” (Šimčikas 2018). When
497 people who eat meat are removed from the survey data approximately one
498 per cent of the population identifies as vegetarian and does not eat meat, an
499 amount that has not significantly changed since the mid-1990s (Šimčikas
500 2018). Let us imagine that without the existence of Grandin’s system, the
501 percentage of vegetarians would double to two percent of the population. In
502 other words, let us assume that the absence of Grandin’s system would be as
503 powerful a motivator to adopt vegetarianism as all actually existing
504 motivations combined. Even under this generous assumption, the number of
505 additional people who would have become vegetarian is small. Given the
506 large number of animals now processed by Grandin’s system, it does not
507 seem reasonable to view the reduction in their suffering as being outweighed
508 by the failure of the vegetarian population to rise from one to two percent.
509 Even in such a world, the reduced suffering of the vast majority of animals
510 killed to feed 98 percent of society would be a significant moral gain.

511 Another reason some protectionists may not rank Grandin’s system
512 superior to traditional slaughter is due to the thought that it increases
513 profitability. As Gary Francione puts it, Grandin’s work means that meat
514 companies are “becoming better at exploiting animals in an economically
515 efficient manner by adopting measures that improve meat quality and worker
516 safety” (2008: 75). On this understanding of Grandin’s system, the ostensible

517 concern with animal well-being is a fig leaf obscuring its real rationale, which
518 is the more efficient exploitation of animals.⁸

519 This objection takes at face value Grandin's frequent assertions that a
520 humane system is also a more profitable one. Grandin's discussion of the
521 economic impact of humane slaughter however is often couched in general
522 terms. Neither Grandin's popular writings nor her academic texts discuss the
523 economic costs of implementing her system. When she has specified possible
524 cost savings they have sometimes turned out to be small. In 1995 for example
525 Grandin calculated that bruises of fed steers and heifers cost the industry \$22
526 million per year, or one dollar per animal (Grandin 2000). At the time a 500-
527 600 pound steer would have sold for \$330-\$400 (Shulz 2018). This raises the
528 possibility that the economic advantages of Grandin's system may be
529 minimal. Independent studies of the economic impact of farm animal welfare
530 regulations also document that they can increase rather than reduce costs.
531 One study for example found that the introduction of minimum space
532 requirements for egg-laying hens saw the price of eggs increase nine percent
533 (Mullaly and Lusk 2018). Although the study looked at the egg rather than
534 beef industry it nevertheless serves as a reminder that welfare measures need
535 not save the industry any money. The claim that Grandin's system makes the
536 exploitation of animals more efficient thus remains unproven.

537 But Even if Grandin's system did increase profitability this would not
538 gainsay its status as an improvement on traditional slaughter. The meat
539 industry has long been extremely efficient to begin with. During the period in
540 which Grandin's system has been in operation, there has been little chance of
541 the general public converting to vegetarianism, let alone veganism, en masse.

⁸ An anonymous reviewer raised this objection.

542 For the overwhelming majority of the animals involved, the realistic options
543 were being slaughtered according to either Grandin's method or its less-
544 humane predecessor. The reduction in suffering Grandin's system represents
545 is justified even if it comes at the cost of some gain in industry efficiency,
546 particularly if that gain is small or negligible.

547 **Grandin's Arguments for Omnivorism Revisited**

548 As we saw, two of Grandin's four arguments for meat-eating involved an
549 appeal to evolution. Anyone who follows contemporary political debates will
550 recognize in Grandin's work a curious shift that often occurs when
551 evolutionary theory is invoked in contentious moral disputes. Although
552 evolutionary theory emphasises flux, adaptation and change on an
553 explanatory level, it is frequently invoked at a normative level to prevent or
554 rule out some innovation or shift. The defence of traditional gender roles
555 offered by evolutionary psychologists against feminist critiques is a well-
556 known example. In Grandin's case, the "unnatural" option in question is
557 switching to a meat-free diet. In this way her work reflects the time and place
558 in which it was written, North America after the rise of evolution as not only
559 a biological paradigm, but a cultural touchstone as well.

560 Grandin has something in common with other writers who make
561 normative appeal to evolutionary processes. Such thinkers commonly take it
562 for granted that if such processes have normative implications, they must be
563 conservative. That is, it seems routine for thinkers who make normative
564 appeals to Darwinism to overlook the possibility that evolutionary theory
565 might challenge the status quo in a given field. In Grandin's case, she appeals
566 to a concept of what is natural in an evolutionary sense to ground a
567 conservative stance toward animal agriculture. Yet such an argument passes

568 over in silence the many aspects of industrial farming that violate or redirect
569 the animals' normal biological functions.

570 As an example, consider the account Grandin offers of the steps a farmer
571 took to breed pigs at an economically efficient rate:

572
573 Each boar had his own little perversion the man had to do to
574 get the boar turned on so he could collect the semen. Some
575 of them were just things like the boar wanted to have his
576 dandruff scratched while they were collecting him. (Pigs
577 have big flaky dandruff all over their backs.) The other
578 things the man had to do were a lot more intimate. He might
579 have to hold the boar's penis in exactly the right way the
580 boar liked, and he had to masturbate some of them in exactly
581 the right way. There was one boar, he told me, who wanted
582 | to have his butt hole played with. "I have to stick my finger
583 in his butt, he just really loves that," he told me. Then he got
584 all red in the face. I'm not going to tell you his name,
585 because I know he'd be embarrassed (Grandin and Johnson
586 2005: 103).
587

588 The activity Grandin describes here is a form of bestiality, something
589 boars do not spontaneously seek out with humans, with whom they cannot
590 reproduce. The sexual element may make us squeamish, but it symbolizes a
591 larger truth about agriculture. When it is practiced on an industrial scale it
592 requires frustrating or redirecting an animal's normal behaviors or biology,
593 most obviously through confinement, but also through procedures mentioned
594 above such as castration. Grandin's evolutionary perspective asks us to take
595 seriously the idea that an animal's evolved nature is relevant to determining
596 how we should treat it. But even if we grant for the sake of argument that
597 evolutionary theory should be conceived of in normative terms, it is not clear
598 why its implications are necessarily conservative. It could just as easily be
599 taken to justify a radical critique of the meat industry and the many
600 "unnatural" acts it involves. Even if Grandin's normative understanding of
601 evolutionary theory is correct, in short, it seems inadequate. For there are

602 many elements of modern agriculture that do not meet the standard of
603 naturalness Grandin appeals to in her evolutionary mode.

604 But let us look beyond this general consideration to the specific
605 evolutionary arguments that Grandin offers. As we saw, the first one took
606 over the idea of co-evolution from Budiansky, whose argument was in turn
607 inspired by the work of archeologist David Rindos. A potential danger that
608 can occur when a theory from one discipline is invoked to settle a debate in
609 another is that the theory in question is mischaracterized as being more
610 settled and authoritative in the home discipline than is in fact the case. I
611 believe this has happened with Budiansky's appropriation of Rindos. He does
612 not adequately acknowledge that while Rindos's theory is a respectable one
613 within archeology, it has inevitably been subject to criticism and debate.

614 In a review of theories of domestication for example, archeologist Peter
615 Bellwood notes that the domestication of plant crops took place with different
616 speeds in different regions, and that Rindos's emphasis on co-evolution is
617 better able to explain the gradual domestication of fruits and tubers that took
618 place in regions such as New Guinea and the Amazon than the sudden
619 explosion of cereal crops that took place in China and Mesopotamia
620 (Bellwood 2005: 25). Bellwood cautions against "one line explanations" for
621 something as complex and regionally diverse as the rise of agriculture, and
622 argues that co-evolution is more appropriately regarded as one among many
623 concepts that need to be invoked to explain the origin of domestication. To
624 the degree that there are grounds to doubt the history of domestication
625 Budiansky relies on, therefore, there will also be grounds to doubt the
626 normative implications Budiansky derives from that history.

627 Let us assume however that Budiansky's historical account is correct. Even
628 if that were the case, his argument would still face a problem. Why should a
629 co-evolutionary account of the origins of animal agriculture have the
630 normative implication that we must continue to eat meat? Rindos, it is worth
631 noting, does not see any conservative implications following from co-
632 evolutionary theory as it applies to plants. "Although I call for a
633 nonintentionalistic interpretation of the evolution of agricultural systems, this
634 is not to be read as support for the status quo; indeed, the reverse is true"
635 (Rindos 1984: 285). Rindos gives the example of plant-breeding projects and
636 agricultural developments that arise in response to food shortages. If the co-
637 evolutionary theory is correct, he argues, then it will only enhance the
638 breeding of improved crops and other conscious agricultural changes (1984:
639 284). If coevolution does not entail conservatism in the case of plants, why
640 should things be any different with animals?

641 It is a shortcoming of Budiansky's account that he does not answer this
642 question. He instead seems to take it for granted that if animal agriculture had
643 a non-intentional origin, this implies that we have a moral obligation to
644 continue raising animals for slaughter. Such an assumption however is
645 unlikely. Since the time of David Hume, philosophers have debated whether
646 it makes sense to see is-claims as entailing ought-claims. Even critics who
647 reject Hume's unbridgeable divide between facts and values acknowledge
648 that moral claims can be derived from factual statements in a simplistic and
649 hasty way. In Budiansky's case, his particular transition from the realm of
650 causation to that of justification is bedeviled by two issues that undermine his
651 conclusion that "we have no choice" but to continue eating pigs, chickens and
652 cows.

653 The first problem is that his claim that we must continue raising animals
654 to eat them is at odds with by Budiansky's reliance on the concept of a
655 preadaptation. On Budiansky's telling, the docility and other traits that made
656 some species suitable for domestication originally arose for a different reason
657 in nature. Yet if that is the case, it means there is no necessary link between a
658 trait's continued existence and its continuing to perform the same function. In
659 the United States for example some vegans currently operate sanctuaries for
660 farm animals, where cows, pigs and chickens receive food and shelter for the
661 purpose of their own protection rather than slaughter. If factory farms
662 declined while the number of such sanctuaries increased, it would represent a
663 form of domestication detached from the purpose of meat eating. Something
664 similar would happen if our society saw a widescale conversion to Hinduism,
665 in which we no longer raised cattle for beef but regarded them as holy
666 creatures, allowing them to walk the streets as they do in India.

667 Such new forms of domestication are worth considering not because they
668 are likely to happen any time soon, but because they illustrate the conceptual
669 possibility of docile animals continuing to exist without being raised for food.
670 Such a transition would only be in keeping with Budiansky's narrative of
671 preadaptation. Yet when it comes to defending the status quo regarding meat
672 eating, Budiansky equates the idea of domesticated animals continuing to
673 exist with the idea of their continuing to perform the same function. This is
674 inconsistent with the evolutionary story he tells, which separates the question
675 of a trait's continued existence from its continuing to perform the same
676 function.

677 The second problem with Budiansky's argument cuts deeper. It has to do
678 with the bedrock notion that if something has an evolutionary rather than

679 intentional origin, that fact obliges us to preserve the thing in question. There
680 are aspects of our own biology that are the result of non-conscious
681 evolutionary forces, yet we do not take this to rule out change and
682 intervention regarding those traits. Human beings for example evolved so as
683 to be susceptible to viruses and to reproduce through sex. None of these
684 biological truths however show that a moral wrong occurs when someone
685 takes anti-viral medication or practices birth control. A co-evolutionary
686 understanding of the origin of agriculture no more obliges us to preserve
687 agricultural practices that arose nine thousand years ago than an evolutionary
688 understanding of biology obliges us to preserve aspects of our own biological
689 identity that are even older.

690 Grandin links her evolutionary account to the idea that food animals
691 themselves benefit from domestication, in that they experience a death more
692 merciful than that which they experience in the wild. It is not clear however
693 why this is relevant. An animal dying in nature has a different consequence
694 than one killed for food. When it is eaten by another predator or decomposes
695 into the earth, it contributes to the ongoing existence of other animal and
696 plant life. It is doubtful that there is currently any realistic way for ecosystems
697 to sustain themselves other than through the natural cycle of life and death. It
698 is plausible therefore to think animal deaths in the wild are necessary, in a
699 way that raising and killing them for food is not.

700 Grandin's second evolutionary argument holds that human beings had
701 evolved so as to require both meat and plant food. This claim overlooks
702 evidence suggesting that the health impact of vegetarian diets is either
703 positive or neutral. The official view of the American Dietetic Association's
704 for example is that "appropriately planned vegetarian diets, including total

705 vegetarian or vegan diets, are healthful [and] nutritionally adequate . . . Well-
706 planned vegetarian diets are appropriate for individuals during all stages of
707 the life cycle, including pregnancy” (ADA 2009: 1266). That meat-free diets
708 can be healthy has also been acknowledged by national dietician associations
709 in Australia, Canada and the United Kingdom (DAA 2018, DOC 2003, BDA
710 2005). Such statements remind us that it is possible to live a healthy life
711 without eating meat. This is surely why vegans have existed for thousands of
712 years, and why they exist in large numbers in places like India today.

713 But the primary reason dieticians’ statements are worth noting is to
714 illustrate the standard of proof that Grandin must meet to substantiate her
715 claim that avoiding meat is not in keeping with our biology. She would have
716 to explain away the nutritional evidence running counter to her suggestion,
717 and present negative health evidence of her own. That Grandin does neither
718 of these things suggests that she may misunderstand the sense in which it is
719 accurate to say our species evolved as both plant and meat eaters. We are
720 natural omnivores in the sense that we are able to digest either plant or
721 animal foods, not in the sense that our biology requires us to continue to
722 consume both. Grandin is therefore wrong to say that our evolutionary
723 history rules out widespread veganism.

724 In recounting her own experience on a vegetarian diet, Grandin suggests
725 that the situation may be different for people with autism. This is a more
726 limited claim, but it also suffers from a lack of evidence. Unlike her habit
727 elsewhere in her writings, Grandin does not cite any scientific evidence for
728 her empirical claim about autistic physiology. Nor does she take note of the
729 experience of other autistic authors who have given up meat without
730 reporting any negative health consequences (O’Neill 2000: 225; Hull 2018).

731 Meat-free diets are in fact fairly common among autistic people, in part
732 because they have a lower level of food acceptance than the general public
733 (Ledford and Gast 2006). As a guide to food issues for autistic adults notes,
734 “many of us are vegetarians or vegans, or ‘want to be,’ or are working toward
735 the goal of vegetarianism” (Clark 2002: 1). Such factors suggests that Grandin
736 either has made a false generalization from her own experience, or wrongly
737 blamed her vegetarian diet for health problems that were caused by another
738 source.

739 In addition to advancing evolutionary arguments, Grandin, as we saw,
740 took up the question of why we extend a greater moral status to a disabled
741 human than we do to an animal with a similar level of cognitive ability. Her
742 response was that biologically, we have an instinct to protect our own kind.
743 Given how the handicapped and other groups have historically been
744 ostracized, this claim requires more support than Grandin provides.
745 However, even if Grandin is right, it still does not justify the moral chasm that
746 separates animals from severely mentally handicapped humans. An instinct
747 to protect members of our own kind only precludes higher moral status for
748 animals if morality must always overlap with what our instincts tell us to do.
749 Anger and sexual attraction may be instinctive, however, but we do not take
750 this to show that giving reign to our temper or our sexual impulses is always
751 justified. So even if we did have an instinct to protect every member of our
752 own species, it would not justify a lower moral status for animals.

753 Grandin’s final argument invoked the moral knowledge generated by
754 slaughter. This argument has special significance, in that people with autism
755 have traditionally been thought to have such empty interiors as to rule out the
756 very possibility of inner self-examination. The autistic psyche was long

757 likened to an “empty fortress,” as the title of a book on autism once put it
758 (Bettelheim 1972). Grandin’s reflections on slaughter as a ritual serve as a
759 valuable reminder that the inner lives of people with autism can be rich and
760 complex enough to engage in the quest for meaning that is often associated
761 with religion. An exhaustive account of the ethical significance of Grandin’s
762 writings would need to give special emphasis to this aspect of her work.

763 When it comes to the narrow issue of the ethical status of animals,
764 however, Grandin’s reflections do not justify continuing to kill them for food.
765 One reason is the perennial problem of religious arguments not holding
766 legitimacy for people who do not share the religion in question. The idea that
767 killing animals places us in touch with a larger cosmic order makes
768 supernatural assumptions that many modern readers do not share and for
769 which Grandin offers no justification. Even if we overlook this, however,
770 there are other grounds on which someone who took a religious view of the
771 universe could have a similar experience. They might read a religious text, or
772 pray or reflect on animal birth rather than death. Even if we grant the
773 importance of cosmic awareness, therefore, there are surely other ways to
774 achieve it than through mechanized killing, which could be abolished without
775 reducing the possibility or likelihood of spiritual development.

776 A similar problem holds with Grandin’s claim that killing animals helps
777 us see the value of life. Even if it is always true—and Grandin’s account of
778 sadist slaughterhouse employees suggests it is not—it is unlikely we will stop
779 valuing life if we stop eating meat. If anything, an ethics of affirming life
780 seems most in keeping with a refusal to kill animals when we do not have to.

781 There is a noticeable difference between Grandin’s work as a designer of
782 slaughterhouses and her work as a critic of veganism. When it comes to

783 designing slaughterhouses, Grandin is focused and methodical. She works
784 from an interlocking set of principle drawn from animal behaviour research
785 and applies them in a systematic way to the problem of slaughterhouse
786 design. When it comes to addressing the problem of veganism, by contrast,
787 Grandin invokes a series of ad hoc arguments derived from many different
788 sources, ranging from evolutionary theory to spiritual experiences she has
789 had inside slaughterhouses. Taken individually, none of her arguments
790 succeed. Collectively, they highlight a major blind spot in Grandin's writings.
791 In the matter of veganism, Grandin has for years criticized it on unjustified
792 grounds. Despite her valuable contributions to the well-being of animals as a
793 designer of humane slaughterhouses, this is a serious shortcoming of her
794 work.

795 **Conclusion**

796 One of Grandin's most popular works, *Thinking in Pictures*, contains a
797 photograph of a Buffalo-handling facility Grandin designed for a wildlife
798 refuge in Oklahoma. Bison who pass through the facility are auctioned off
799 once a year to private breeders, so the facility ultimately serves the purpose of
800 slaughter. But that is not its only function. It is also used for conservation
801 purposes, as when Buffalo in the park require veterinary attention. As such,
802 the photo gives rise to reflection on alternative uses for Grandin's gifts. In a
803 more humane universe than ours, one can imagine Grandin having
804 opportunities to use her unique insights into animal behaviour for a purpose
805 other than slaughter. Which is to say, for a purpose other than endless and
806 unnecessary killing.

807 As it stands, the Grandin who exists in our universe warrants both
808 praise and criticism. Many of the criticisms offered above could be avoided if

809 Grandin admitted that vegetarianism was morally superior to meat
810 consumption, and instead defended humane slaughter as a second-best
811 compromise. The great value of her system is that it has the capacity to make
812 a difference in a world of meat eating, which animal protection advocates to
813 date have not been able to eliminate. Grandin's misguided attempts to
814 portray humane slaughter as superior to veganism defend her approach at
815 the wrong level. She opposes it to veganism in ideal terms, when it is more
816 plausible regarded as a pragmatic compromise at the non-idea level.

817 Grandin's writings speak to a real ethical impulse in the way they focus on
818 the moral issues surrounding slaughter. Grandin's particular method of
819 addressing those issues, however, allows a meat-eating society to maintain a
820 compartmentalized view of animals, one that never implicates consumers in
821 the negative aspects of meat production. Just how indulgent Grandin's
822 approach is toward the appetite for meat can be seen by comparing it to
823 compromise views that fall short of veganism yet nonetheless call for reduced
824 meat consumption. One such view for example recommends a diet that
825 includes a limited amount of free-range beef alongside plant foods (Davis
826 2003). Another holds that the average person would be better off cutting meat
827 consumptions of all kinds, whether it is beef, chicken or anything else (Pollan
828 2006). A third possible compromise is the "vegan before six" diet. It sees
829 dinner is the only meal of the day in which meat is consumed, and even then
830 only in small amounts (Parker-Pole 2009).

831 These diets all have something in common. They are all premised on the
832 view that it is reasonable to ask people to make changes regarding the
833 amount of meat they consume. Grandin's dietary ethic is different from these
834 compromise views in that it does not ask the average meat-consumer to

835 reduce the amount of meat in his or her diet even slightly. On Grandin's
836 account one could have a daily diet of bacon for breakfast, chicken for lunch
837 and steak for dinner and still have done all one could to reduce animal harm.
838 Perhaps it is unsurprising that the meat industry would embrace a reformer
839 with this particular message. One has to wonder however how far we can go
840 in reducing animal harm when the amount of meat consumed remains off the
841 table of discussion. Grandin's animal ethic is one with real moral value. Yet
842 from the point of view of protection theory it ultimately signifies not how far
843 our society has come regarding animals, but how far we still have to go.

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