

A BRAVE NEW *JUNGLE*: FACTORY FARMING AND ADVOCACY IN THE TWENTY-FIRST CENTURY

JAMES I. PEARCE*

In the first decade of the last century, a young writer—fresh off of a novel that had enjoyed middling success—accepted a stipend from Fred D. Warren, editor of the socialist weekly *The Appeal to Reason*, to write about what Warren viewed as the wage slavery imposed on workers in the Chicago stockyards.¹ That young writer, Upton Sinclair, produced, in serial form, *The Jungle*, a novel depicting both the lives and working conditions of those in the stockyards and the corruption endemic in those in power. *The Jungle* engaged public opinion beyond what Warren or Sinclair could have imagined. Indeed, it became an international best-seller and was eventually translated into thirty-five different languages.²

After appearing in serialized form, Doubleday press republished *The Jungle* in February 1906. By June of the same year, Congress had responded to the widespread public concern engendered by its publication by passing the Pure Food and Drug Act.³ President Roosevelt, who signed the law into force, had already spoken in favor of such a measure in his annual address to Congress the previous December.⁴ Curiously, Sinclair himself had far less interest in exposing the rampant contamination at the stockyards—discussion of

* Duke University School of Law, J.D. *magna cum laude*; Yale University, B.A. 2003. This Note grows out of a paper written for Professor Jed Purdy's 2009 Seminar on *Sources of Environmental Law*. Professor Purdy provided many helpful comments and suggestions. For careful editorial work, I thank Katelyn Love, Almira Moronne, Laura Pisoni, and Courtney Shephard. Emily Eidenier Pearce offered numerous insights and her endless support. Of course, the errors are all mine.

1 See Robert M. Crunden, *Muckraking, Progressivism and the Pure Food and Drug Law*, reprinted in UPTON SINCLAIR, *THE JUNGLE* 445, 450 (Virginia Clare Eby ed., Norton Crit. ed. 2002) (1906).

2 See Virginia Clare Eby, *Introduction*, in SINCLAIR, *THE JUNGLE*. *supra* note 1, at viii.

3 See *Biography of TR: Pure Food and Drug Act*, THEODORE ROOSEVELT ASS'N, <http://www.theodoreroosevelt.org/life/PureFoodDrug.htm> (last visited Apr. 19, 2011).

4 Crunden, *supra* note 1, at 454 (“I recommend that a law be enacted to regulate interstate commerce in misbranded and adulterated food, drinks, and drugs.” (quoting President Theodore Roosevelt, Annual Message to Congress (Dec. 5, 1905))).

“pure food” laws was relegated to one sentence⁵—as much as he sought to enlighten the general public of the exploitative working conditions found there. Perhaps most telling is Sinclair’s rueful observation that he had “aimed at the public’s heart, and by accident . . . hit it in the stomach.”⁶ *The Jungle* nonetheless had captured the public’s imagination and led to congressional action.

Just over a hundred years later, this essay examines whether it is possible once again to engage the public as *The Jungle* did. Specifically, it surveys a number of attempts to lay before the public a case against large-scale industrial production and slaughter of livestock. Known to governmental regulators as concentrated animal feeding operations (CAFOs) and to the general public as factory farms, these entities are responsible for over 95% of the chicken, eggs, turkey, and pork consumed in the United States, and over 75% of beef cattle.⁷ The arguments against such large-scale operations are wide-ranging: appalling treatment of animals, environmental degradation, threats to public health, a high toll on worker safety and health, and exorbitant consumption of fossil fuels. Yet none of the more recent efforts by novelists, journalists or philosophers have managed to spark the same sense of public concern and outrage that Upton Sinclair did in the early twentieth century.

At the outset it should be made clear that this essay is not comparative history intended to analyze the success of *The Jungle* against the relative failure of more recent works. In this vein, a number of—admittedly superficial—observations are appropriate: Congress was already significantly concerned with pure food and drug laws before *The Jungle* was published, whereas no such congressional concern with factory farming is evident at present;⁸ novels published

5. *Id.* at 451.

6. Crunden, *supra* note 1, at 452. This phrase is much quoted. It originally appeared in a magazine article Sinclair wrote in October 1906. See Upton Sinclair, *What Life Means to Me*, COSMOPOLITAN, Oct. 1906, at 41.

7. See JONATHAN SAFRAN FOER, *EATING ANIMALS* 271 (2009). Foer explains that these figures are “[his] own calculations based on the most current available data” and cites “2007 census inventory and EPA regulations.” See *id.* Foer also notes that factory farming produces approximately 60% of all cows raised for dairy. *Id.*

8. “Between 1879 and 1906, 190 measures connected to pure food or drugs were introduced into the Congress, but only 8 ever became law.” Crunden, *supra* note 1, at 452. By contrast, the only significant legislative act in the past decade related to factory farming was the authorization of additional funding to enforce the Human Slaughter Act of 1958. Farm Security and Rural Investment Act of 2002, Pub. L. No. 107-171, § 10305, 116 Stat. 493–94. And even this bears some scrutiny, as one article has noted: “This may be one of the few occasions where Congress has felt the need to, in effect, reenact an existing statute, though it did not increase the

in serial form in 1906 probably engaged a larger proportional readership than most, if not all, texts produced today; President Roosevelt advocated for laws in a congressional address while no similar presidential advocacy on factory farming has yet appeared;⁹ and so on. Rather this juxtaposition is offered in a hopeful note: If it is possible for a novel to incite such widespread public concern in 1906, can it be done again? What might progressive muckraking look like today?

This essay proceeds in four parts. Part I describes the characteristics of CAFOs as well as the regulatory framework that governs them. This Part concludes that legal attempts to rein in the practices in CAFOs have failed and will likely continue to do so. Part II then provides a number of arguments against the system of CAFOs. The focus in this Part is on the substance of the argument, not on how—or by whom—they are presented. Part III takes up the question of public argument by analyzing recent attempts to persuade the public of the ills of CAFOs outlined in Part II. Finally, Part IV, looking to the recently developed theory of cultural cognition, offers some tentative thoughts on strategy. In brief, this last Part tries to

likelihood of compliance by requiring fines or other significant penalties for violations.” David J. Wolfson & Mariann Sullivan, *Foxes in the Henhouse: Animals, Agribusiness and the Law: A Modern American Fable*, in CASS R. SUNSTEIN & MARTHA C. NUSSBAUM, ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS 205, 208 (2004). An exception to this lack of congressional interest may be the Senate’s attempt to amend the Federal Food, Drug, and Cosmetic Act at the end of 2010. See FDA Food Safety Modernization Act, S. 510, 111th Cong. (2010). President Obama signed the Food Safety Modernization Act into law on January 4, 2011. See Margaret A. Hamburg, *Food Safety Modernization Act: Putting the Focus on Prevention*, THE WHITE HOUSE BLOG (Jan. 3, 2011, 4:53 PM), <http://www.whitehouse.gov/blog/2011/01/03/food-safety-modernization-act-putting-focus-prevention> (noting the new law “directs the Food and Drug Administration . . . to build a new system of food safety oversight”). How effective this law will be remains to be seen.

⁹ A policy document posted by the White House in January 2009 entitled “Real Leadership for Rural America” included a section on regulating CAFOs. In relevant part, it states that “Barack Obama has worked for tougher environmental regulations on CAFOs. He has supported legislation to set tough air and water pollution limits for livestock operations, including limits on nitrogen, phosphorus, hydrogen sulfide, ammonia, and other pollutants. In the Obama Administration, the Environmental Protection Agency will strictly monitor and regulate pollution from large CAFOs, with fines for those who violate tough air and water quality standards.” OBAMA FOR AM., REAL LEADERSHIP FOR RURAL AMERICA, available at <http://documents.foodandwaterwatch.org/obamaruralplanfactsheet.pdf>. This statement notwithstanding, anti-CAFO advocates are still waiting for action. See David Kirby, *Is Obama Ready to Take on Factory Farming? Part Two: White House Realities*, HUFFINGTON POST, Nov. 11, 2009 (5:22 PM), http://www.huffingtonpost.com/david-kirby/the-future-of-factory-far_b_352696.html (arguing that while the Obama administration’s rhetoric is promising, no concrete actions have been taken). In any case, a policy statement on a website is not akin to a statement made to Congress.

imagine what a twenty-first century analogue to *The Jungle* might look and sound like.

I. IDENTIFYING THE TARGET

Without using guidance from governmental regulators, formulating a working definition of factory farming is troublingly difficult. Novelist Jonathan Safran Foer acknowledged as much when he, channeling the U.S. Supreme Court, wrote recently, “Like pornography, factory farming is hard to define but easy to identify.”¹⁰ This essay will largely refer to CAFOs, although it should be noted—as described below—that “CAFO” is in fact a term of art referring to larger industrial farming operations. Government regulators also refer to animal feeding operations, or AFOs, to describe operations smaller than CAFOs.¹¹ As is the case in their larger counterparts, livestock at many AFOs are also concentrated and confined. Finally, a recent report by the Pew Commission added another acronym to this alphabet soup: IFAP, or industrial farm animal production.¹² This essay will use “factory farming” or “CAFO” throughout.

It is worth briefly noting that this terminological difficulty reflects a deeper truth about the industry: its purposive efforts at obfuscating how factory farms operate and what they actually do. Most publically available information on CAFOs is either a product of industry research or involves some amount of undercover, investigative research.¹³ In compiling recommendations on the future of factory farming, the Executive Director of the Pew Commission on

10. FOER, *supra* note 7, at 34. *Cf.* *Jacobellis v. Ohio*, 378 U.S. 184, 197 (1964) (Stewart, J., concurring) (“I shall not today attempt further to define the kinds of material I understand to be embraced within [the category of hard-core pornography]; and perhaps I could never succeed in intelligibly doing so. But I know it when I see it, and the motion picture involved in this case is not that.”).

11. An AFO refers to “a lot or facility (other than an aquatic animal production facility) where the following conditions are met: (i) Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and (ii) Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.” 40 C.F.R. § 122.23 (2009).

12. See PEW COMM’N ON INDUS. FARM ANIMAL PROD., PUTTING MEAT ON THE TABLE: INDUSTRIAL FARM ANIMAL PRODUCTION IN AMERICA (2008), available at <http://www.ncifap.org/bin/ej/PCIFAPFin.pdf>.

13. See, e.g., FOER, *supra* note 7, at 81–89 (describing undercover visit to poultry factory farms in California); GAIL A. EISNITZ, SLAUGHTERHOUSE: THE SHOCKING STORY OF GREED, NEGLECT, AND INHUMANE TREATMENT INSIDE THE U.S. MEAT INDUSTRY 14 (1997) (author adopts an “undercover identity and persona” to investigate slaughterhouses); see also ERIC SCHLOSSER, FAST FOOD NATION (2001).

Industrial Farm Animal Production observed in the preface to the report that “[w]e found significant influence by the industry at every turn: in academic research, agriculture policy development, government regulation, and enforcement.”¹⁴ Invoking President Eisenhower’s warning of the dangers of the military-industrial complex, the preface raised concern about “the agro-industrial complex—an alliance of agriculture commodity groups, scientists at academic institutions who are paid by the industry, and their friends on Capitol Hill.”¹⁵ Seeing clearly through this morass of influence necessarily involves a certain amount of muckraking.

A. *Brief Overview of the Development of Factory Farming and CAFOs*

This section briefly traces how factory farms came into existence. In doing so, it lays out the arguments for factory farming. Importantly, the industry itself has not made a case for CAFOs—at least not in a manner intended to reach the larger public. It is easy to understand why. Given the various and disturbing aspects of CAFOs,¹⁶ industry representatives must know that the more attention is paid to how chicken, pigs, and cattle become the poultry, meat, and dairy products that reach supermarket shelves, the less inclined consumers would be to consume.¹⁷ Nevertheless, factory farming has become *the* dominant way in which such products reach the American consumer. This section explains why.

Perhaps the most insightful way to illustrate the intensification of animal-intensive agricultural production over the course of the twentieth (and into the twenty-first) century is with a simple statistic: the poultry industry today slaughters more birds in one day than the entire industry did in the year of 1930.¹⁸ The beginning of animal-intensive industrial agriculture is often dated to around that time, when the swine industry began to use mechanized slaughterhouses.¹⁹ Supported by advances in crop production and development of farm-management technology,²⁰ factory farms increased in size and

14. PEW COMM’N, *supra* note 12, at viii.

15. *Id.*

16. See discussion *infra* Part II.

17. See FOER, *supra* note 7, at 87 (“The power brokers of factory farming know that their business model depends on consumers not being able to see (or hear about) what they do.”)

18. EISNITZ, *supra* note 13, at 165.

19. PEW COMM’N, *supra* note 12, at 5.

20. For an enthusiastic discussion of farming technology that enabled the development of

centralization over the course of the twentieth century. The Pew Commission succinctly captures this development: “The current trend in animal agriculture is to grow more in less space, use cost-efficient feed, and replace labor with technology to the extent possible.”²¹ Finally, the vertical integration of meat-packing companies—that is, the ability to centralize facilities to raise and keep animals until they are shipped to a slaughterhouse—enabled further growth.²²

These factory farms grew so large that federal agencies developed ever-larger categories to regulate them. The term CAFO first developed in regulations in the mid-1970s and was revised in 2003 to reflect the growth during the interim thirty years.²³ Today, regulations distinguish between large- and medium-sized CAFOs.²⁴ A medium CAFO could ostensibly house over 600 dairy cows, 9998 swine weighing over 55 pounds, 80,000 chickens and a number of other animals.²⁵ For large CAFOs, the sky is the limit.

A number of factors drove—and continue to drive—this transformation. As a dairy farmer explained to Jonathan Safran Foer, the model for a viable dairy farm has changed such that a farmer must have at least twelve hundred cows.²⁶ Observing that, quite simply, “[m]ore animals mean greater economies of scale and lower cost per unit,” the Pew Commission reported increases in the average animals per operation in the swine, poultry, cattle, and egg production industries.²⁷ These larger operations have enabled greater control “over the factors that influence production such as weather, disease and nutrition” such that production generally occurs more quickly than it would otherwise.²⁸ Finally, these operations have lowered the

intensive industrial agriculture, see Jules B. Billard & James Blair, *The Revolution in American Agriculture*, NAT. GEOGRAPHIC, Feb. 1970, at 147. Wendell Berry offers an extended critique of this article in WENDELL BERRY, *THE UNSETTLING OF AMERICA: CULTURE & AGRICULTURE* 59–73 (1977).

21. PEW COMM’N, *supra* note 12, at 5.

22. *Id.* at 5–6. Some industries are more vertically integrated than others. Swine and poultry are overwhelmingly integrated, while beef cattle and dairy are considerably less so. *See id.*

23. *See* National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 68 Fed. Reg. 7,175, 7,179 (Feb. 12, 2003).

24. *See* 40 C.F.R. § 122.23 (2009).

25. *Id.* § 122.23(b)(6).

26. *See* FOER, *supra* note 7, at 94.

27. PEW COMM’N, *supra* note 12, at 6.

28. *Id.*

price²⁹ of meat and dairy products relative to available disposable income with the result that consumers in America now consume more animal-derived food products than anywhere else in the world.³⁰

B. Legal and Regulatory Framework

CAFOs, as defined under federal law, are regulated primarily by the Environmental Protection Agency (EPA) and the United States Department of Agriculture (USDA), while other federal, and state, agencies also have some role in the regulatory process. As envisioned in a 1999 strategy document produced by the EPA and the USDA, the federal government establishes “minimum national expectations, technical standards and regulatory requirements” for factory farms, while state and local authorities are responsible for ensuring that such standards and requirements are enforced.³¹

There are essentially two federal statutes under which regulation of CAFOs is authorized. Importantly, *neither one* of these statutes is the Animal Welfare Act of 1966, as livestock and poultry are explicitly exempted from its coverage.³² On the environmental side, the Federal Water Pollution Act, later known as the Clean Water Act (CWA), regulates point source pollution and requires polluters to acquire permits under the National Pollutant Discharge Elimination System (NPDES) system.³³ Under the CWA, the EPA regulates the amount of manure and wastewater discharged into public waterways.³⁴ As the Pew Commission report and others have noted,

29. As the Pew Commission report notes, the lowered price is not only a function of the increased size and centralization of CAFOs. Other important factors include the overproduction of soybean and corn products (itself a result of U.S. agricultural policy) as well as a “subsidy in the form of externalized environmental costs.” *Id.* at 6. This latter factor is discussed in more detail in Part II.

30. *See id.* at 7.

31. *See* U.S. DEP’T. OF AGRIC. & U.S. ENVTL. PROT. AGENCY, UNIFIED NATIONAL STRATEGY FOR ANIMAL FEEDING OPERATIONS § 6 (1999), available at <http://www.epa.gov/npdes/pubs/finafost.pdf>.

32. *See* 7 U.S.C. § 2132(g)(3) (2006).

33. This background is discussed in the most recent EPA regulation of CAFOs. *See* Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines for Concentrated Animal Feeding Operations in Response to the Waterkeeper Decision, 73 Fed. Reg. 70,417, 70,419 (Nov. 20, 2008) (to be codified at 40 C.F.R. pts. 9, 122 & 412).

34. The EPA 2003 regulations were challenged by both environmental groups and industry representatives. The Second Circuit held that the EPA had violated the CWA on a number of counts. *See* *Waterkeeper Alliance v. U.S. Env’tl. Prot. Agency*, 399 F.3d 486 (2d Cir. 2005). In response, the EPA issued a revised regulation in November 2008. *See* Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations

however, these regulations tend to be under-enforced.³⁵ Recently, the Humane Society of the United States petitioned the EPA to regulate CAFOs under the Clean Air Act as well.³⁶ The EPA has not yet responded.³⁷

The other statute governing CAFOs is the Humane Slaughter Act.³⁸ The Act is brief and short on details: in essence it requires the “use of humane methods in the slaughter of livestock” in part to “prevent needless suffering.”³⁹ An initial—and significant—problem with the Act is that it does not apply to the poultry industry at all.⁴⁰ Moreover, reports of the non- or under-enforcement of this Act are legion.⁴¹ Indeed, the late Senator Robert Byrd (D-WV) lamented the widespread violation of the Act in 2001: “Federal law is being ignored. Animal cruelty abounds. It is sickening. It is infuriating. Barbaric treatment of helpless, defenseless creatures must not be tolerated even if these animals are being raised for food.”⁴² Finally, while many states have enacted laws that prohibit cruelty to animals, in almost all cases, there is either a blanket exception for farm animals or an exemption for practices deemed “customary” or “accepted.”⁴³ The upshot is that laws mandating humane treatment for livestock in CAFOs either do not apply or are not enforced.⁴⁴

The laws aiming at the regulation of CAFOs have largely proven

Guidelines, 60 Fed. Reg. 70,417 (Nov. 20, 2008).

35. See PEW COMM’N, *supra* note 12, at 6; *supra* note 29.

36. Brief of Petitioners, Humane Soc’y of the U.S. et al. v. Env’tl. Prot. Agency, Petition to List Concentrated Animal Feeding Operations under the Clean Air Act Section 111(B)(1)(A) of the Clean Air Act, and to Promulgate Standards of Performance under Clean Air Act Sections 111(B)(1)(B) and 111 (D) (Sept. 21, 2009), available at <http://www.humanesociety.org/assets/pdfs/farm/hsus-et-al-v-epa-cafo-caa-petition-final.pdf>.

37. The lead attorney on the petition explained that EPA is “awaiting the [National Air Emissions Monitoring Study] results before [it] make[s] a final decision on the CAFO petition.” Email from Jessica Culpepper, Attorney, Humane Soc’y of the U.S. (March 25, 2011, 15:47 EST) (on file with author).

38. 7 U.S.C. § 1901–07 (2006); see also *supra* note 8.

39. 7 U.S.C. § 1901.

40. See *id.* § 1902(a).

41. See, e.g., EISNITZ, *supra* note 13. Specific examples of violations of the Act are discussed *infra* Part II.

42. 147 Cong. Rec. S7310 (daily ed., July 9, 2001) (statement of Sen. Byrd), quoted in Wolfson & Sullivan, *supra* note 8, at 208.

43. See discussion of state anti-cruelty statutes and the customary farming exemption in Wolfson & Sullivan, *supra* note 8, 209–16.

44. A former USDA inspector told Gail Eisnitz that “the Humane Slaughter Act is a regulation on paper only.” EISNITZ, *supra* note 13, at 191. See also Mark Bittman, *Some Animals Are More Equal Than Others*, N.Y. TIMES OPINIONATOR (Mar. 15, 2011, 8:30 PM), <http://opinionator.blogs.nytimes.com/2011/03/15/some-animals-are-more-equal-than-others/>.

to be toothless because those authorized to enforce the laws have strong disincentives to do so.⁴⁵ Given that the regulatory framework breaks down largely at the point of enforcement, passing more laws—or even appropriating more money for enforcement of current laws, as Congress did with the Humane Slaughter Act in 2002⁴⁶—likely stands little chance of ensuring compliance when measured against the formidable influence and resources of the agricultural industry.⁴⁷ Thus, to the extent those concerned with the multiple ills posed by CAFOs⁴⁸ aim for a change to the status quo, this essay argues that they must look beyond the law to convincing the larger public.⁴⁹ The next two Parts consider arguments against CAFOs and how they have been made.

II. LAYING OUT THE ARGUMENTS

Although the legal framework in place to regulate CAFOs does not function as it should, anti-CAFO advocates have no shortage of arguments available to convince the larger public to oppose the practices and effects of animal-intensive industrial agriculture. This Part analyzes these arguments. It attempts—in a largely impressionistic manner—to plot along a spectrum the extent to which different arguments will prove effective in convincing the general public as a matter of substance. To be more concrete, this Part considers arguments in the following order: animal welfare, environmental degradation, worker health and safety, fossil fuel consumption and related energy issues, and finally, public health and nutritional concerns. To be clear, this Part does not aim to provide exhaustive accounts of the arguments made in each area. Many of the sources cited offer more developed versions of these arguments. Rather, this Part sketches out the arguments and briefly considers the

45. This is frequently because government inspectors fear retribution for critical reports from agency superiors who face lobbying pressure from industry representatives. *See* EISNITZ, *supra* note 13, at 187–212.

46. *See supra* note 8.

47. Recall the quotation from the preface to the Pew Commission report. *See supra* text accompanying note 12.

48. *See infra* Part II.

49. CAFOs have often avoided stringent state-based regulations by simply picking up and moving to a new state. Indeed, states will often actively court CAFOs with lower regulations. Recently, Idaho sought to lure California's poultry farmers after California had passed stricter animal welfare rules. Idaho sought to provide, in the words of the chairman of the state Senate's Agricultural Affairs Committee, "a place where farmers can continue to be profitable." *See* Lauren Etter, *Poachers Arrive at Egg Farms: Other States Hope to Lure California Poultry Producers Unhappy About a New Law*, WALL ST. J., Jan. 13, 2010, at A3.

extent to which these arguments might prove successful in engaging the larger public.

A. *Animal Welfare*

With two qualifications, the life of an animal in a factory farm realizes Hobbes's vision of man without the security of the Leviathan: "continual fear and danger of violent death" where life is "solitary, poor, nasty, brutish and short."⁵⁰ First, whereas man in a Hobbesian world was merely in danger of violent death, it is almost always a certainty for a chicken, pig, or cow living in a factory farm.⁵¹ Second, there is nothing remotely solitary about the existence of a factory-farmed animal. Frequently hogs have their tails docked, poultry have their beaks seared off and their spurs removed, and cattle have their horns cut down to avoid injury to the high numbers of other animals confined in relatively small spaces.⁵² Such alterations occur without the use of anesthesia despite knowledge that they inflict pain on sentient creatures.⁵³

These are only some of the parade of horrors that makes up the life of animals living in CAFOs. Wendell Berry colorfully captured elements of this ill treatment—as well as of the environmental arguments against CAFOs—in an 1989 essay: "It would not do for the consumer to know that the hamburger she is eating came from a steer who spent much of his life standing deep in his own excrement in a feedlot, helping to pollute the local streams, or that the calf that yielded the veal cutlet on her plate spent its life in a box in which it did not have room to turn around."⁵⁴ Other disturbing practices at

50. THOMAS HOBBS, *LEVIATHAN* 76 (Edwin Curley ed., Hackett Publ'g Co. 1994) (1668). Work on animal cognition has suggested that animals have relatively high levels of awareness regarding their surroundings. *See, e.g.*, ANIMAL SOCIAL COMPLEXITY (Frans B.M. De Waal & Peter L. Tyack eds., 2005) (surveying various animals and arguing that current and future research shows such animals to be complex social beings). For an argument that animals—including farm animals—experience emotional distress, see TEMPLE GRANDIN, *ANIMALS MAKE US HUMAN: CREATING THE BEST LIFE FOR ANIMALS* 177 (2009) ("[S]ows locked up in the sow stalls are in the worst condition. . . . The stall activates the RAGE system when a sow is first put inside because it is a severe form of restraint, which frustrates the animal. . . . Sow stalls also increase FEAR. One study that compared sows living in sow stalls to sows living in large groups found that the sow-stall pigs were more afraid . . .").

51. *See generally* EISNITZ, *supra* note 13 (describing disturbing accounts of the practices of violent deaths of livestock in slaughterhouses).

52. *See* PEW COMM'N, *supra* note 12, at 33.

53. *Id.*

54. Wendell Berry, *The Pleasures of Eating* (1989), reprinted in WENDELL BERRY, *WHAT ARE PEOPLE FOR?* 145, 148 (1990).

CAFOs that result in widespread ill treatment of animals include those that are built into the modes of production and those that largely result from how those modes are implemented. The former include the use of stacked battery cages for laying hens, gestation and farrowing crates that curtail movement for swine to as little as 4.5 feet wide by 6.5 feet long⁵⁵ and, captured most vividly in one of the first exposés of the factory farming system, crates in which calves being raised for veal cannot lie down with their legs extended.⁵⁶

While there may be some general awareness of these modes of production in CAFOs, there is generally less knowledge about the additional suffering inflicted on animals by workers during the “processing” phase. Two particularly gruesome practices are illustrative: “piping” and “thumping.” Piping occurs when a hog that is due to be slaughtered proves unable to move down the chute to where the hog is stunned, hoisted and stuck.⁵⁷ To quickly dispose of a crippled hog, workers have been known to beat it to death with a lead pipe.⁵⁸ “Thumping” is another widely used practice in the swine industry: “Since uniform size is so important to packers, piglets that don’t grow quite fast enough—the ‘runts’—are quickly weeded out. Picked up by their hind legs, thousands are swung and then bashed headfirst onto the concrete floor.”⁵⁹ In some cases, a piglet is “thumped” multiple times.⁶⁰ Thumping and piping are largely byproducts of an animal-processing system that does not tolerate either a slow-down in the production process⁶¹ or any difference in the raw material that is to be “processed.”

55. Such practices are discussed in numerous sources. For a recent account, see PEW COMM’N, *supra* note 12, at 30–40. One source reports that the crates are usually between 4.5 and 5.0 feet wide and 6.5 feet to 8.0 feet long. JAMES R. GILLESPIE & FRANK B. FLANDERS, *MODERN LIVESTOCK AND POULTRY PRODUCTION* 472 (2009). Other sources report far smaller average crate size. See, e.g., Stanley E. Curtis et al., *The Physical Space Requirement of the Sow*, 67 J. ANIMAL SCI. 1242, 1242 (1989) (reporting average crate width of only about 2 feet).

56. See PETER SINGER, *ANIMAL LIBERATION* 129–36 (1975) (describing practices in the veal industry as “the most morally repugnant”).

57. If all goes according to plan, the fatal blow is the one delivered by the “sticker” with a knife to the throat. See EISNITZ, *supra* note 13, at 64–65. Frequently, however, these plans break down. See *id. passim*. For a step-by-step depiction of the hog slaughtering process, see *Offal Good*, U.S. DEP’T OF AGRIC., <http://www.offalgood.com/blog/offal/usda-hog-slaughter/comment-page-1> (last visited Apr. 13, 2011).

58. EISNITZ, *supra* note 13, at 82. One worker described doing this ten or eleven times in one day.

59. *Id.* at 220.

60. *Id.*

61. Cf. SINGER, *supra* note 56, at 151 (“Much of the suffering that occurs in slaughterhouses is a result of the frantic pace at which the killing line much work.”).

While the laundry list of ills animals face in factory farms is troubling, there is not much reason to think this factor alone will galvanize public opinion against CAFOs. This is not to say that the public is uninterested in animal welfare. Indeed, the Pew Commission noted a recent poll indicating that 75% of the public support greater basic animal welfare measures.⁶² And as a society, we clearly have problems with mistreatment of those animals that share households with us.⁶³ Yet arguments that CAFOs should be shut down or at least more strictly regulated because of the mistreatment of cattle, swine, and poultry have not generated anywhere near the momentum as outrage over mistreatment of dogs and cats.⁶⁴ In part, the factory farming industry has done a good job in taking some steps “that are easily marketed and that are aimed at changing public perception.”⁶⁵ Examples include Smithfield’s suggestion it would phase out gestation crates or the development of published standards in the poultry industry.⁶⁶ But such half-measures are likely effective in the face of arguments, frequently made in conversation and in public debate, that the lives of pigs, cows, chickens, and other animals would be equally if not more miserable in “nature” and thus, while such practices may be bad, they are simply an acceptable cost of modern meat production.⁶⁷ Indeed, concerns with animal welfare in CAFOs seem frequently linked to the humorless, “holier-than-thou,” Birkenstock-wearing vegans and vegetarians that embody the radicalism of the fringe-left.⁶⁸ As such, there is little likelihood that such arguments, standing alone, will do much to engage the larger public.

62. See PEW COMM’N, *supra* note 12, at 31 (citing a poll conducted by Oklahoma State University and the American Farm Bureau Federation).

63. One obvious recent example of this is the widespread anger over the revelation that football star Michael Vick raised dogs for dog-fighting. See, e.g., Mark Maske, *Falcons’ Vick Indicted in Dogfighting Case*, WASH. POST, July 18, 2007, <http://www.washingtonpost.com/wp-dyn/content/article/2007/07/17/AR2007071701393.html>.

64. Jonathan Safran Foer taps into and problematizes this divergent sense of animal welfare for livestock and for “companions” when he makes a “case for eating dogs.” See FOER, *supra* note 7, at 24–29. For similar observations, see Barbara Smuts, *Reflections: Responding to the Tanner Lectures*, in J.M. COETZEE, *THE LIVES OF ANIMALS* 107 (1999).

65. PEW COMM’N, *supra* note 12, at 31.

66. *Id.*

67. See, e.g., *Ethical Eating* (C-SPAN television broadcast Dec. 7, 2009), available at <http://www.c-spanarchives.org/program/290684-1> (featuring a debate between former New York Times food writer Frank Bruni and Jonathan Safran Foer).

68. See comments by Bruni and the moderator in *id.*

B. Environmental Degradation

Additional arguments against CAFOs stem from the environmental degradation that has accompanied the rise of factory-farmed animal agriculture. As noted above, Wendell Berry identified the possibility of pollution of waterways by massive amounts of manure seeping into waterways. Cobbling together statistics from government studies and other sources, Jonathan Safran Foer colorfully describes the amount of manure actually involved:

[Virginia-based hog producer] Smithfield alone annually kills more hogs than the combined populations of New York City, Los Angeles, Chicago, Houston, Phoenix, Philadelphia, San Antonio, San Diego, Dallas, San Jose, Detroit, Jacksonville, Indianapolis, San Francisco, Columbus, Austin, Fort Worth and Memphis—some 31 million animals. According to conservative EPA figures, each hog produces two to four times as much shit as a person; in Smithfield's case, the number is about 281 pounds of shit for each American citizen. That means that Smithfield—a single legal entity— produces as much fecal waste as the entire human population of the states of California and Texas combined.⁶⁹

That fact that Smithfield spilled over 20 million gallons of waste from a manure lagoon in 1995⁷⁰—a spill that was twice as large as the *Exxon Valdez*—clearly demonstrates how immense the environmental impact of CAFOs can be.⁷¹

Environmental concerns are not limited only to the possibility of manure leaking into public waterways. In 2006, the Food and Agriculture Organization (FAO) of the United Nations published a comprehensive study of the environmental effects of animal agriculture as currently practiced. The report concluded that “[t]he livestock sector emerges as one of the top two or three most significant contributors to the most serious environmental problems, at every scale from local to global.”⁷² FAO outlined the harmful effects of factory farming on climate change and air pollution.⁷³ While

69. FOER, *supra* note 7, at 175.

70. About the same year, researchers were beginning to study the effects of factory-farmed animal agriculture on the environment. *See generally* ANIMAL WASTE AND THE LAND-WATER INTERFACE (Kenneth Steele ed., 1995) (considering issues of watershed management through hydrological, chemical, biological, physical, political, and socioeconomic perspectives).

71. *See* FOER, *supra* note 7, at 178–79. Smithfield was fined \$12.6 million for the spill, which was the then-largest civil fine ever assessed. At the same time, it is worth noting that currently Smithfield grosses \$12.6 million every ten hours. *Id.*

72. FOOD & AGRIC. ORG. (FAO), LIVESTOCK'S LONG SHADOW: ENVIRONMENTAL ISSUES AND OPTIONS, at xx (2006).

73. *Id.* at xxi–xxii.

conceding that the contribution of livestock to the anthropogenic processes underlying climate change is “not well known,”⁷⁴ the report nonetheless found the livestock sector responsible for eighteen percent of greenhouse gas emissions, thirty-seven percent of anthropogenic methane and approximately two-thirds of anthropogenic ammonia emissions.⁷⁵

The FAO report reached similar conclusions with respect to effects on land degradation and biodiversity. On the latter point, the report noted that while many factors have reduced overall biodiversity, “the livestock sector may well be the leading player . . . since it is the major driver of deforestation, as well as one of the leading drivers of land degradation, pollution, climate change, overfishing, sedimentation of coastal areas and facilitation of invasions by alien species.”⁷⁶ While the FAO report focused on livestock more generally and not factory farms in particular, the Pew Commission report—which did focus on factory farming—similarly identified most of these environmental risks in its study.⁷⁷ In brief, there is little debate that factory-farmed animal agriculture is “damaging our environment in many ways.”⁷⁸

Will these environmental arguments convince people to opt out of the CAFO system? Unlikely—at least, as with arguments about animal welfare, not alone and on their own merits. Importantly, concerns about the environment—and particularly about climate change—remain polarized and politically coded.⁷⁹ Thus, only someone who is already convinced of the value of mitigating climate change will find this environmental argument compelling. But even someone who otherwise finds disturbing the possibility of water

74. *Id.* at 79.

75. *Id.* at xxi.

76. *Id.* at xxiii.

77. See PEW COMM’N, *supra* note 12, at 22–29.

78. JEFFREY MOUSSAIEFF MASSON, *THE FACE ON YOUR PLATE: THE TRUTH ABOUT FOOD* 31 (2009).

79. Divergent discourses on climate change leading up to the December 2009 United Nations Climate Change Conference in Copenhagen illustrate this divide. While some, mostly on the political left, expressed excitement about the possibility of finally “doing something” about climate change, others, mostly on the political right, delighted in the exposure of scientists at the University of East Anglia’s Climate Research Unit, who allegedly “colluded in manipulating data to support the widely held view that climate change is real, and is being largely caused by the actions of mankind.” See Leo Hickman & James Randerson, *Climate Sceptics Claim Leaked Emails Are Evidence of Collusion Among Scientists*, *GUARDIAN* [U.K.], Nov. 20, 2009, <http://www.guardian.co.uk/environment/2009/nov/20/climate-sceptics-hackers-leaked-emails>.

pollution from outsized CAFO manure lagoons may well believe either (in technocratic economic terms) that the economic costs of government regulation does not outweigh the benefit of reducing water pollution or (in populist economic—or libertarian—terms) that an intrusive regulatory state stifles the profitability of private enterprise. The environmental arguments against CAFOs may find more receptivity than those centered on animal welfare, but they are still unlikely to engage the wider public—and particularly those individuals skeptical of environmentalists and their “causes.”

C. Worker Health and Safety

Perhaps the argument that hearkens most directly back to *The Jungle* is the concern over the health and safety of workers in the factory farming system. Indeed, while Upton Sinclair focused on the plight of mostly Eastern European immigrants in the stockyards of Chicago, the factory farms of today are largely populated with migrants—many of them undocumented—from Mexico, El Salvador and Guatemala.⁸⁰ The annual turnover rate at some factory farms reaches as high as 100%,⁸¹ which largely works in favor of the CAFOs. Any time lost in training new employees is far outweighed by the money saved by not paying out benefits, as the then-head of labor relations at IBP—now Tyson’s Fresh Meats—explained: “Insurance, [which] is very costly . . . is not available to new employees until they’ve worked there for a period of a year or, in some cases, six months. Vacations don’t accrue until the second year. There are some economies, frankly, that result from hiring new employees.”⁸²

Given what workers must endure at the processing plants and in the slaughterhouses, such turnover rates are hardly surprising. Eric Schlosser describes meatpacking as “the most dangerous job in the United States,” and statistics—based on reported injuries—indicate that the injury rate in a slaughterhouse is three times higher than in a typical American factory.⁸³ Accounts of injuries suffered in CAFOs include workers killed by falling equipment or falling animals, limbs

80. See ERIC SCHLOSSER, *FAST FOOD NATION* 161 (2001) (“Today, the United States, for the first time in its history, has begun to rely on a migrant industrial workforce. Thousands of new migrants now travel north to work in the slaughterhouses and meat processing plants of the High Plains.”).

81. EISNITZ, *supra* note 13, at 62.

82. *Quoted in* SCHLOSSER, *supra* note 80, at 161. Schlosser also notes that a high turnover makes the workforce less likely to unionize and easier to control. *Id.*

83. *Id.* at 172.

badly damaged and often amputated after getting stuck in industrial machinery, workers being forced to urinate and defecate in their clothing when a foreperson refuses to stop the processing line, and numerous other disturbing anecdotes.⁸⁴ To make matters worse, as the high-speed processing at CAFOs has become more dangerous, regulation at both the state and federal level has grown increasingly lax.⁸⁵ Many of those who suffer injuries encounter difficulties finding employment. After interviewing a number of former CAFO workers, Gail Eisnitz succinctly captured the plight of many: “Drained of their usefulness to the slaughterhouse, they’re cast aside, reminders of a system that places nearly as little value on human life as it does on animal life.”⁸⁶

A less obvious, but in many ways no less troubling, aspect of the work environment at factory farms is the effect it has on its workers and their families. One former worker at a hog processing plant described his experiences as follows:

When you’re standing there night after night, digging that knife into these hogs, and they’re fighting you, kicking at you, squealing, trying to bite you—doing whatever they can to try to get away from you—after a while you just don’t give a shit You become emotionally dead And you get just as sadistic as the company itself. When I was sticking⁸⁷ down there, I was a sadistic person. By the end of the night everybody would be yelling at everybody else.⁸⁸

This same worker recounted that the worst part of his experience was how it affected his family life. He and his wife separated because he often came home drunk and abused her physically.⁸⁹ Other workers talked about the increase of domestic violence since working in factory farms.⁹⁰ In brief, the deleterious consequences of taking on the “most dangerous job” do not end when one steps off the factory floor.

While arguments about the dangerous conditions facing workers in CAFOs may prove more troubling to the American public than concerns about animals or the environment, there is little reason to believe that it will generate any more interest than did Sinclair with

84. See generally EISNITZ, *supra* note 13, at 269–75.

85. See SCHLOSSER, *supra* note 80, at 179.

86. EISNITZ, *supra* note 13, at 275.

87. A sticker is the person at the slaughterhouse who cuts the animal’s throat after it has been stunned.

88. Quoted in EISNITZ, *supra* note 13, at 74–75.

89. *Id.* at 75–76.

90. See *id.* at 87, 269.

respect to working conditions and workers.⁹¹ In fact, given that many of those working in CAFOs today come from migrant communities, one could imagine hostility on that point alone, such that the issue of working conditions and the health and safety of the workforce gets lost in contentious debate about immigration reform and normative disputes about the role of, depending on one's position, either the "undocumented" or the "illegal" immigrants. Moreover, background American ideals, whether real or imagined, promoting mobility and freedom of contract tend to push against efforts to reform worker safety.⁹² If someone does not like her working arrangements, says a lingering strain of *laissez faire* in the American consciousness, she is always free to search out something else. Finally, the political valence of an argument about working conditions for an overwhelmingly migrant workforce probably does not convince many who were not already (at least somewhat) convinced by animal welfare and environmental arguments. These arguments still largely cater to the political left.

D. Fossil Fuel Consumption

A relatively recent argument against the kind of industrial agriculture practiced by factory farms is a concern with fossil fuel consumption. While this argument is related to the environmental degradation that results from the operation of factory farms, it also identifies a distinct strain of concern that became piquant during the last presidential race: energy independence. Michael Pollan captured this point with a letter, written before the election, to whichever candidate would be elected president: "We need to wean the American food system off its heavy 20th-century diet of fossil fuel and put it back on a diet of contemporary sunshine."⁹³ The Pew Commission report fills in the details: "[Factory farming] is more energy intensive than the traditional practice of raising food animals . . . requiring disproportionately large inputs of fossil fuel, industrial fertilizers, and other synthetic chemicals [T]he ratio of fossil fuel energy inputs per unit of food energy produced . . .

91. Recall Sinclair's lament that he had aimed for the public's heart and ended up hitting their stomach. *See supra* note 6 and accompanying text.

92. The Supreme Court infamously relied on a putatively constitutional norm of freedom of contract to strike down a state's effort to regulate working conditions. *See Lochner v. New York*, 198 U.S. 45 (1905).

93. Michael Pollan, *Farmer in Chief*, N.Y. TIMES, Oct. 12, 2008, <http://www.nytimes.com/2008/10/12/magazine/12policy-t.html> (italics omitted).

averages 3:1 for all US agricultural products combined, but for industrially produced meat products the ratio can be as high as 35:1.”⁹⁴ In fact, the food system uses more fossil fuels than other sector in the economy after automobiles.⁹⁵

The American approach to food autonomy that undergirds the creation of the factory farm system provides fodder for this argument. As Pollan explains, the food and agriculture policies currently in place in the U.S. are largely “designed to maximize production at all costs relying on cheap energy to do so.”⁹⁶ The rationale behind such a system was a determination that the U.S. should never have to rely on other countries for food—and that by providing food to other countries, the U.S. could, in essence, usurp those countries’ autonomy.⁹⁷ This view was famously promoted by former U.S. Secretary of Agriculture, Earl Butz, when he described food as a weapon and “one of the principle tools in our negotiating kit.”⁹⁸ But a crucial assumption on which this system relies—that cheap energy is and will always be abundant—is no longer tenable.⁹⁹ Indeed, given concerns that the United States must rely on foreign exporters for the very fossil fuels that allow CAFOs to operate, there is a claim that the U.S. no longer enjoys true food autonomy.¹⁰⁰ Accordingly, the fossil fuel consumption at factory farms is not merely an environmental worry; rather, it implicates questions of energy independence and national security.

94. PEW COMM’N, *supra* note 12, at 29.

95. Pollan, *supra* note 93. The food system accounts for approximately nineteen percent of fossil fuel consumption.

96. *Id.*

97. Upon passage of a law that provided food at subsidized costs to other countries, U.S. Senator Hubert Humphrey commented, “I have heard . . . that people may become dependent on us for food. I know that was not supposed to be good news. To me that was good news, because before people can do anything they have got to eat. And if you are looking for a way to get people to lean on you and to be dependent on you, in terms of their cooperation with you, it seems to me that food dependence would be terrific.” *Quoted in* HERMAN E. DALY & JOSHUA C. FARLEY, *ECOLOGICAL ECONOMICS: PRINCIPLES AND APPLICATIONS* 340 (2004).

98. While a number of sources cite this quotation, it is hard to track down its origins. It appears to have made at the 1974 World Food Conference in Rome.

99. *Cf.* Pollan, *supra* note 93 (“Cheap energy . . . is the reason New York City now gets its produce from California rather than from the ‘Garden State’ next door, as it did before the advent of Interstate highways and national trucking networks Whatever we may have liked about the era of cheap, oil-based food, it is drawing to a close.”).

100. The U.S. continues to export surplus crops abroad. But the mere fact that other countries may depend on the U.S. for food should not, the argument runs, lessen concern that the U.S. itself depends on other countries to provide the fossil fuel necessary to sustain the American food system.

Arguments that plausibly invoke national security tend to engage wider swaths of the public than do some of the other approaches advanced thus far. And as noted, focus on fossil fuel consumption folds nicely into current debates about energy independence through alternative sources and smarter production methods. This argument offers an alternative: return as much as possible to the closed loop farming system that predated the rise of factory farming with the result that much of the need for synthetic chemicals and industrial fertilizers will be lessened.¹⁰¹ The flaw in this argument is its dependence on engaged public attention on energy markets. This, of course, is simply a fancy way of talking about the price of a gallon of gas. If gas prices trend upward and can be articulated alongside concern about relying on countries like Saudi Arabia and Venezuela to provide the oil that runs our food system, this argument has bite. If not, claims about “food autonomy” and fossil fuel consumption probably fall flat.

E. Public Health and Nutritional Concerns

The final argument against the factory farming system advanced here focuses on issues at the heart of much of current national conversation: public health and nutritional concerns. Indeed, it is precisely because there is so much interest on public health issues—understood here to refer to non-nutritional health risks associated with the factory farming system—and questions of nutrition that this final set of arguments is presented as the most likely to capture the larger public’s attention. Again, thinking back to Upton Sinclair and *The Jungle* is pertinent: why not just start off aiming for the public’s stomach (and related concerns about what may upset that stomach)?¹⁰²

In broad terms, there are two arguments here that, by presenting mirror images of rate of incidence and harm associated with that risk, buttress each other. First, there are horror stories of meat contaminated with *Escherichia coli*—better known simply as *E. coli*¹⁰³—that in turn infects humans, often small children with weaker

101. This is also the argument raised as why a non-CAFO system is more environmentally sustainable. The closed loop avoids creating two separate problems out of manure disposal and fertilization. See BERRY, *supra* note 20, at 62.

102. See *supra* note 6.

103. Of the various strains of *E. coli*, most are harmless. *E. coli* 0175:H7 is the cause of deadly food poisoning. See *E. coli* 0157:H7 (*Escherichia coli* 0157:H7 infection), MEDICINET.COM, http://www.medicinenet.com/e_coli_0157h7/article.htm (last visited Apr.

immune systems, and literally melts their intestines.¹⁰⁴ In terms of tragedy, it is hard to imagine a more devastating story than that of a parent mourning a child struck dead in a period of six weeks following the consumption of contaminated raw meat.¹⁰⁵ However, with the exception of some larger outbreaks, the risks of coming down with a food-borne pathogen like *E. coli* O175:H7 or *salmonella enterica* remain relatively minimal.¹⁰⁶ Thus, while the consequences of such pathogens are truly dire, the likelihood of eating infected meat products still seems remote enough that it does not dissuade consumers.¹⁰⁷

A related set of public health concerns also reflect this low incidence-but-dire-consequences paradigm. For example, there is some indication that some infectious diseases that can cross over into human populations develop more readily in factory farm than elsewhere.¹⁰⁸ Recently, it has been suggested that the H1N1 virus developed as a result of factory farming of hogs in North Carolina.¹⁰⁹ And given the widespread use of antimicrobials and antibiotics in the diets of many animals living in CAFOs, similar concerns center on the development of ever newer and more drug resistant viruses.¹¹⁰ What

14, 2011).

104. *E. coli* in children often transforms into hemolytic uremic syndrome (HUS) which slowly destroys vital organs. See EISNITZ, *supra* note 13, at 52.

105. See *id.* at 50 *et passim*. The recent film *Food, Inc.* also includes a mother who, following the death of her two-and-a-half-year-old son from *E. coli*, turns into a food safety advocate. See *FOOD, INC.* (Magnolia Pictures 2008).

106. That said, a 1999 report indicated that in the previous year, there had been 73,000 hospitalizations and 60 deaths due to such pathogens. See PEW COMM'N, *supra* note 12, at 13.

107. Importantly, it should be noted that while food production has always involved the risk of such contamination, the risk has demonstrably increased in the era of factory farming. See *id.* See also Press Release, Ctr. for Disease Control, Investigation Update: Multistate Outbreak of Human *Salmonella* Enteritidis Infections Associated with Shell Eggs (Dec. 2, 2010), available at <http://www.cdc.gov/salmonella/enteritidis> (describing *salmonella* outbreak and noting that 1939 illnesses have been attributed to the outbreak between May 1 and November 30, 2010).

108. See PEW COMM'N, *supra* note 12, at 13.

109. See Michael Greger, *CDC Confirms Ties to Virus First Discovered in U.S. Pig Factories*, HUMANE SOC'Y OF THE U.S. (Aug. 26, 2009), http://www.humanesociety.org/news/news/2009/04/swine_flu_virus_origin_1998_042909.html ("A preliminary analysis of the H1N1 swine flu virus isolated from human cases in California and Texas reveals that six of the eight viral gene segments arose from North American swine flu strains circulating since 1998, when a new strain was first identified on a factory farm in North Carolina.").

110. See PEW COMM'N, *supra* note 12, at 13. For a more general, albeit brief, discussion of the problems related to the overuse of antibiotics in CAFOs, see DOUG GURIAN-SHERMAN, *CAFOS UNCOVERED: THE UNTOLD COSTS OF CONFINED ANIMAL FEEDING OPERATIONS 5* (2008), available at http://www.ucsusa.org/assets/documents/food_and_agriculture/cafos-uncovered.pdf.

scares consumers is the possibility of crossover, even if science to date suggests such crossover is rare.

By contrast, the second argument here involves the nutritional consequences of a diet that relies on factory farmed animal products. Here, the effects of such diets—obesity, the development of type II diabetes—are both widespread and widely viewed as relatively manageable, albeit unpleasant—and certainly not as frightening as the immediate effects of food-borne pathogens such as *E. coli* O175:H7). Given the amount of antibiotics and corn that factory-farmed animals consume, much of it makes its way into the systems of the humans eating these animals.¹¹¹ We, of course, also eat what we are eating eats.¹¹² And because what we are eating has feasted on diets for which their systems were not built—*e.g.*, corn for ruminants—and which has had the effects of generating ever-higher levels of massive weight gain and illness, we are not eating well.¹¹³

Taken together, the public health and nutritional arguments against CAFOs seem more likely to engage the public than claims about animal welfare, the environment, worker safety and fossil fuel consumption. On the one hand, the pure horror associated with *E. coli* O175:H7 or the development of possibly widespread contagious diseases like swine flu certainly grabs headlines. On the other hand, if anything has caught the public's attention over the past couple of decades, it is food and nutrition.¹¹⁴ From food fads to the cable network shows of dueling chefs, Americans are fascinated with and troubled by their relationship to food.¹¹⁵ One writer has made a career of tracking this relationship, largely arguing that Americans have lost touch with the products they eat, which in many cases do not deserve the moniker "food."¹¹⁶ In brief, when considering the practices of

111. See MICHAEL POLLAN, *OMNIVORE'S DILEMMA* 75 (2006) (noting studies tracing human health problems to farm animal consumption habits).

112. This is also a point Jonathan Safran Foer makes. See FOER, *supra* note 7.

113. See POLLAN, *supra* note 111, at 75 ("In the same way ruminants are ill adapted to eating corn, humans may in turn may be poorly adapted to eating ruminants that eat corn.").

114. For an interesting take on how this has developed, see generally Mary Eberstadt, *Is Food the New Sex?*, HOOVER INST. POL'Y REV., Mar-Apr. 2009, available at <http://www.hoover.org/publications/policy-review/article/5542>.

115. On January 15, 2010, the most-emailed article at the New York Times was entitled "The Best 11 Foods You Aren't Eating." Tara Parker-Pope, *The 11 Best Foods You Aren't Eating* (June 30, 2008, 8:50 AM), <http://well.blogs.nytimes.com/2008/06/30/the-11-best-foods-you-arent-eating/?em>. The article generated almost two thousand comments, many from people assuring the author that they were in fact eating lots of Swiss chard, turmeric, dried plums and pumpkin seeds (but bemoaning that pomegranate juice was so expensive).

116. This is, of course, Michael Pollan. For more on Pollan, see *infra* Part III.C.

CAFOs through the prism of public health concern and hyper food-consciousness, one is more likely to find a curious—and possibly receptive—ear.

III. EFFORTS AT PERSUASION

With the substantive arguments against the factory farming system on the table (so to speak), this Part looks at how those arguments have been made to the public. The objective here is not to analyze the modes of arguments in terms of efficacy; rather, the focus is on how the arguments have been made. Nor is this consideration exhaustive. It focuses on a number of works that have gained some prominence or, in one case, will likely be widely considered.¹¹⁷ Moreover, it is important to note that not all of these writers have been primarily interested in the factory farming system and thus have only touched on it incidentally. With this caveat aside, the categories are as follows.

First, we consider the ethical philosopher. This section focuses on the work of Peter Singer, who, since the publication of his groundbreaking book *Animal Liberation*, has remained a vocal contributor to debates about factory farming, largely through the lens of animal welfare. The second section considers investigative journalists. Here, the primary text is Eric Schlosser's *Fast Food Nation*, although also considered is Gail Eisnitz's lesser-known exposé *Slaughterhouse*. The third section, "The Food Guy," is devoted to the work of Michael Pollan. Finally, the last section focuses on storytellers, namely, Jonathan Safran Foer, and to a lesser extent, J.M. Coetzee. The sections presented in this order follow a loose chronological schema insofar as they track what is taken to be the major work in each genre.

A. *The Ethical Philosopher*

Peter Singer has publically explored what it means to lead an ethical life since the publication of an article arguing that one should always renounce a small pleasure in order to relieve the suffering of others (his example being the cost of clothing purchases weighed against a contribution to humanitarian relief efforts in what would

117. This refers to Jonathan Safran Foer's *Eating Animals*. See *supra* note 7. Published in November 2009, it was reviewed in the *New York Times* and *New Yorker*, which, given Foer's success as a novelist, is not surprising.

become Bangladesh).¹¹⁸ His tone mixes conversational writing with a hard, prescriptivist message: There are normatively correct actions to take, and to choose not to take them indicates a weakness of character. At the root of his arguments is that an individual is faced with ethical dilemmas throughout the course of everyday life and that the individual should make the normatively correct decision to the greatest extent possible.

In *Animal Liberation*, Singer attacked the widespread abuse of animals, most notably in the ways in which animals were casually used and disposed of for research and in how livestock in factory farms were treated.¹¹⁹ His arguments focused on rooting out widespread “speciesism”—an analogue to racism that posited that human beings had no claim to inherent superiority over other species. Again, perhaps predictably, speciesism was subject to harsh critique¹²⁰—for many, whether their reasons are divine or simply empirical, the superiority of humans to other terrestrial species is obvious. For Singer and those who support his views, avoiding speciesism demands acknowledgement of the interests of animals and conduct that does as much as possible to recognize and validate those interests. Abstaining from using animal-tested products and eating meat are starting points, not simply the end goal.

Mapped onto the debate about factory farming, this mode of public argument suggests simple, if draconian, consequences: wipe out the system. As a matter of the ineluctable march of ethical philosophy, Singer’s position is difficult to rebut. But as a matter of practical agrarian economics, Singer’s position is hard to take seriously. That is, the factory farming system will not come to a sudden stop because of the inherent and obvious animal cruelty perpetrated within it; the system is too profitable. In terms of the substantive arguments outlined above, *Animal Liberation* is uniquely—and from ethical perspective, perhaps admirably—focused on questions of animal treatment. The panoply of other arguments is irrelevant to the ethical question, and the fact that there may be other good policy reasons to change how livestock are treated on factory

118. Peter Singer, *Famine, Affluence, and Morality*, 1 PHIL. & PUB. AFF. 229 (1972).

119. See generally SINGER, *supra* note 56 (writing in the mid-1970s, however, the most mechanized and crowded aspects of factory farming were yet to come).

120. For a sophisticated critique of Singer’s animal liberation theory, see Richard A Posner, *Animal Rights: Legal, Philosophical, and Pragmatic Perspectives*, in ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS, *supra* note 8, at 51, 59–66 (arguing that “[m]embership in the human species is not a morally irrelevant fact”).

farms is interesting, but not ultimately important. Thus, as a matter of public argument, in *Animal Liberation* Singer appeals to the ethical conscience and, in essence, lays out a challenge to the reader: if you accept that supporting factory farmed animal agriculture is ethically wrong, do not support it, even if that involves a decrease in your pleasure from the consumption of factory farmed products.¹²¹ Perhaps unsurprisingly, this did not lead to a widespread conversion to vegetarian or vegan practices.

A postscript on Singer's engagement with public argument about factory farming is important. In 2006, he co-wrote a book with Jim Mason entitled *The Way We Eat: Why Our Food Choices Matter*.¹²² The book is still predominantly a work of ethical philosophy; indeed, the normative edge to the subtitle suggests as much. At the same time, the book itself changes strategic tack from *Animal Liberation* in interesting ways. First, the book traces three different families by observing what food decisions they make and then uses those decisions as a launching point to discuss how each family could make more ethical choices. The first family shops at large supermarkets and Costco, eats meat and dairy products, and largely makes decisions based on price.¹²³ The second family is somewhat more conscious of food choices but also more affluent: they shop at Whole Foods and occasionally pay more for organic foodstuffs.¹²⁴ The book's heroes are clearly the members of the third family who eat a vegan diet. The section that tracks them is full of arguments as to the moral imperatives underlying vegan food choices.¹²⁵ This clear favoritism notwithstanding, the book makes clear that its authors recognize the need to speak to a wider constituency than simply those already committed to making the uncompromising ethical decisions demanded by *Animal Liberation*. Second, and just as important, *The Way We Eat* is no longer really a book about animals; it is a book about food. From the perspective of public argument, it is a wise choice. Though it may be perplexing to those dedicated to Singer's

121. SINGER, *supra* note 56, at 159 ("While we should do all these things, there is one other thing we can do that is of supreme importance; it underpins, makes consistent, and gives meaning to all our other activities on behalf of animals. This one thing is that we take responsibility for our own lives, and make them as free of cruelty as we can. The first step is that we cease to eat animals.").

122. PETER SINGER & JIM MASON, *THE WAY WE EAT: WHY OUR FOOD CHOICES MATTER* (2006).

123. *Id.* at 15–20.

124. *Id.* at 83–91.

125. *Id.* at 187–96.

ethics, arguments about animal welfare have historically fallen flat with the public, while arguments that point to problems with the food people consume more often engage an otherwise disengaged public.

B. Investigative Journalists

Perhaps the most direct historical link to the exposé that Sinclair envisioned is the genre of work done by investigative journalists. And the most well-known work in this genre is the 2001 book by Eric Schlosser, *Fast Food Nation*.¹²⁶ Indeed, Schlosser explicitly adopted the mantle of the investigative journalist; when interviewed in *Food, Inc.*, he describes his initial interest in understanding the food system in terms of exposing the hidden world that provides Americans with food, and particularly with fast food.¹²⁷ Schlosser's other work examines parts of the American shadow-world that he argues makes up somewhere close to ten percent of American GDP: marijuana, migrant labor, and pornography.¹²⁸

Fast Food Nation is the story of how Americans came to eat so much fast food and of the system that provides such food in cheap and abundant quantities. While that story necessarily includes a recounting of many of the horrors of factory farming described above, Schlosser meticulously scrubs the narrative of normative assessments. His approach is that of the journalist's throughout: the words—and in some cases the images¹²⁹—frame the issue, and the reader is free to draw whatever conclusions seem most appropriate. And while the story Schlosser tells makes it almost difficult to see the factory farming system as anything other than deeply disturbing, Schlosser works hard to remind the reader that there is nothing inherently wrong with enjoying the experience of eating fast food, and that such enjoyment is, rather, perfectly reasonable. In fact, he devotes an entire chapter to explaining “why the fries taste so good,” which

126. SCHLOSSER, *supra* note 13.

127. See FOOD INC., *supra* note 105.

128. ERIC SCHLOSSER, REEFER MADNESS: SEX, DRUGS AND CHEAP LABOR IN THE AMERICAN BLACK MARKET (2004).

129. For example, Schlosser includes a picture of a worker, perhaps a migrant laborer, holding up an arm on which is visible a long scar, presumably from an injury while working at a CAFO. Flanking the man is a wide-eyed young girl as well as a figure who could be her mother. While the image includes no caption, it certainly is suggestive of the dangerous nature of work in the meatpacking business (and in case the reader did not draw this conclusion on the strength of the image alone, the following page begins a chapter entitled “The Most Dangerous Job”). See SCHLOSSER, *supra* note 80, at 168–69.

discusses in detail the magic of food additive chemistry.¹³⁰ Schlosser himself appears in *Food, Inc.* enjoying a burger—presumably a product of the factory farming system—unapologetically.

For much of the book, Schlosser struggles with a tension in what appears to be his project—exposing the unseemly undersides of the American food system—and the extent to which that project *is* advocacy, demands advocacy or instead needs to avoid the label of advocacy. His basic approach suggests that his role is in some ways the impartial observer and reporter of a food system. But finally, in the epilogue, he advances specific proposals for how the food system should change—mostly through congressional action.¹³¹ That his suggestions are directed to Congress is telling, and arguably somewhat naïve.¹³² His vision and self-presentation as an investigative journalist suggest a certain faith in the process whereby the press exposes what is hidden from the public's view, and the public, properly enlightened, takes corrective action. The book itself, or more properly the information contained therein, *is* the achievement. Unlike Singer's ethical approach to animal treatment, Schlosser does not demand that the reader grapple with these problems. Instead, he frames industrial livestock operations as a bad system, with woeful results for those who work within it, and something should be done about it . . . by Congress.

A slightly grittier, and certainly less well known, piece of investigative journalism on CAFOs is Gail Eisnitz's *Slaughterhouse: The Shocking Story of Greed, Neglect, and Inhumane Treatment inside the U.S. Meat Industry*.¹³³ The title, pulling no punches, basically captures the tone of Eisnitz's foray into the world of factory farming. She goes deep undercover, using a false name—as she tells the reader in the first chapter of the book—and traveling on a shoestring budget to interview workers who risk, and in one case lose, their jobs by talking with her.¹³⁴ She is largely uninterested in the grand sweep of economic forces and curious tangential stories that occasionally sidetrack—in very interesting and often enlightening ways—

130. *See id.* at 111–31.

131. *See generally id.* at 262–70.

132. *See supra* Part I.B.

133. EISNITZ, *supra* note 13.

134. In response to similar covert investigations, Florida senator Jim Norman proposed a bill in the spring of 2011 that would ban all unauthorized photography of farms. Warren Elly, *Bill Would Ban Photos, Videos of Farms*, MYFOXTAMPABAY.COM (Mar. 11, 2011), <http://www.myfoxtampabay.com/dpp/news/state/bill-would-ban-photos-on-farms-03112011>.

Schlosser's narrative. Eisnitz starts from the premise that the system of factory farming is flawed to the point of perversion, and her narrative carries unrelentingly to this conclusion. It is a powerful, if not particularly artful, read. Unlike Schlosser, Eisnitz sees the government—including presidential administrations on both sides of the political spectrum as well as Congress—as deep in the pockets of the agricultural industry.¹³⁵ *Slaughterhouse* is more a plaintive cry to the reader; Eisnitz ends her book by telling us she is “honored and deeply humbled to have had the privilege to share this information with such courageous readers.”¹³⁶

In both *Fast Food Nation* and *Slaughterhouse*, the writing style takes the reader inside the system and, ostensibly, lets her decide for herself what she thinks. Both have the feel of a televised exposé; indeed, *Fast Food Nation* was made into a movie,¹³⁷ and Eisnitz lobbied, ultimately unsuccessfully, to have 60 Minutes do a show based on her research.¹³⁸ Yet curiously, while both Schlosser and Eisnitz expose factory farming through discussion of most of the substantive arguments above, neither does much to challenge the reader to change her engagement with the system, or to simply opt out. Schlosser, as noted, reassures the reader that we all like fast food and that to do so is okay, but also suggests we should nonetheless be unhappy about the system that produces it. Eisnitz's entire account suggests a rejection of factory farming, but never expressly articulates such a rejection. The reader is left worried by a system exposed, but ultimately unsure of what to do.

C. *The Food Guy*

Perhaps no one has done as much thinking, talking and writing about food over the past decade as Michael Pollan has. In addition to regularly contributing essays to the *New York Times* that range from his experience gardening on both coasts or the ongoing disappearance of cooking in American kitchens, Pollan has written a number of books that trace, in different ways, how people, particularly Americans, interact with their food. His most sustained, thoughtful—and apparently most commercially successful—account, *The*

135. See EISNITZ, *supra* note 13, at 310 (noting how the USDA classified rabbits as poultry in 2005 such that slaughterhouses need not apply the Humane Slaughter Act to them).

136. *Id.* at 312.

137. FAST FOOD NATION (Fox Searchlight 2006).

138. EISNITZ, *supra* note 13, at 152, 213–14.

Omnivore's Dilemma,¹³⁹ looks at three sources of food that nourish Americans today: the industrial (corn), the pastoral (organic foodstuffs) and the hunter-gatherer (a hodge-podge of vignettes centered on gathering mushrooms and hunting wild boar). More recently, he has written a manifesto on how Americans should eat,¹⁴⁰ and then spun off the last chapter of this book into sixty-four often playfully phrased “food rules.”¹⁴¹

Michael Pollan is the “food guy.” His interest is, above all, in food consumption: what we choose to eat, why we make the choices we do, and how we can choose better. Perhaps this last component—how we can choose better—most aptly characterizes Pollan’s body of work. In this way, Pollan often reads like a particularly erudite self-help guide to better food choices. If kernels of this approach are evident in *The Omnivore's Dilemma*, it comes to full fruition with the recent publication of *Food Rules*, a pamphlet-size paperback containing the titular sixty-four “rules,” aphorisms to guide better eating. And in his role as food consultant and guru, Pollan’s interest is as much in the *eating* of food as it is in the talking about food; his life’s work is equal parts thoughtful and gustatory. In *The Omnivore's Dilemma*, Pollan is himself the main character, a curious, fallible Everyman tagging along with industrial corn farmers in Iowa, trying to keep up with the early risers on Joel Salatin’s Polyface Farm in Virginia, debating the merits of vegetarianism by reading Peter Singer in a steakhouse¹⁴² and later struggling to transform his urbanite instincts into a passable boar-hunter.¹⁴³ Michael Pollan is any one of us, except that he somehow gets paid to embark on exciting food adventures.

This background informs his analysis of the factory farm system. It is clear that the system troubles him, but his tone never reaches to the level of high ire that one might find in, for example, Gail Eisnitz’s account of slaughterhouses. Although he largely seems indifferent to arguments about animal welfare, he purchases a bull and in trying, unsuccessfully, to follow it through the CAFO system,¹⁴⁴ arguably illustrates the system’s disregard for animals as effectively as do any

139. POLLAN, *supra* note 111.

140. MICHAEL POLLAN, *IN DEFENSE OF FOOD: AN EATER'S MANIFESTO* (2008).

141. MICHAEL POLLAN, *FOOD RULES* 41 (2009) (“Rule 19: If it came from a plant, eat it; if it was made in a plant, don’t.”).

142. POLLAN, *supra* note 111, at 304–13.

143. *Id.* at 334–63.

144. *Id.* at 65–84.

gruesome accounts of animal suffering. And while he does touch on public health and environmental arguments against CAFOs, his most central concern is the “food,” that results from this system. Indeed, Pollan devotes an entire chapter to the plants where corn is manufactured into all sorts of usually sweet and invariably unhealthy “food-like” products.¹⁴⁵ Ultimately, the ills of the factory farm for Pollan are how it affects the American diet and, in turn, American health and wellbeing.

This may be the most successful way to engage the larger public. Whereas other commentators will scold a reader for not making ethical choices or leave her concerned about the factory farming system but not sure what to do, Pollan presents a palatable and very readable account of why one may choose to opt out of this system: the “food” is just no good. Pollan, like Schlosser, understands the allure of cheap and tasty fast food burgers, but also effectively explains that better alternatives exist—Joel Salatin’s Polyface farm being one very prominent example.¹⁴⁶ Furthermore, he emphasizes that better food choices improve our lives. If we also can ascribe ethical conduct to our choices, so much the better. Ultimately, though, we want to feel and eat better, and the way to do this involves avoiding the factory farming system. If Everyman–Pollan can manage to do it, so can his readers.

D. Storytellers

In 1997, J.M. Coetzee was invited to deliver the Tanner Lectures at Princeton University. In lieu of more traditional public texts, Coetzee wrote two stories in which renowned novelist Elizabeth Costello—a frequent character in Coetzee’s fiction and almost assuredly a reflection, in some ways, of the novelist himself—herself delivers a series of lectures on the “enterprise of degradation, cruelty, and killing which rivals anything the Third Reich was capable of”¹⁴⁷—that is, the system of factory farms. As Amy Gutman observes in the volume introducing the lectures, “In the frame of fiction, Coetzee’s story of Elizabeth Costello’s visit to [fictional] Appleton College contains empirical and philosophical arguments that are relevant to the ethical issue of how human beings should treat animals.”¹⁴⁸ While

145. *Id.* at 85–99.

146. Pollan devotes a number of chapters to his stay at Polyface Farm. *Id.* at 185–261.

147. COETZEE, *supra* note 64, at 21.

148. *Id.* at 4.

Costello's arguments fall squarely within the realm of ethical philosophy, albeit not as tightly argued as the work of Peter Singer, Coetzee's presentation of these arguments—as well as various counterarguments made by other characters—places this mode of argument into a different genre: storytelling.

The most engaging recent piece of storytelling is Jonathan Safran Foer's *Eating Animals*. Although his title suggests a vegetarian tract, it is in fact an artful wordplay about us: “We are not merely animals that eat, but eating animals.”¹⁴⁹ Foer began researching the food system when, some three years before the book's publication, he became a parent and was confronted with the question of what to feed his son. That research grew into the thoughtful memoir that urges readers to consider opting out of the factory farming system. Foer is not a proselytizer and is in fact quick to distance himself from the tradition of advocates—like Peter Singer—whose conclusions demand change of the reader.¹⁵⁰ Moreover, he understands the tensions between trying to make ethical food choices and food's social role—what Pollan describes as “table fellowship”—and argues for the benefits of vegetarianism over Pollan's selective omnivorism.¹⁵¹

But Foer's book is not about winning arguments and persuading people in overt ways. It is, as Foer himself suggests, about storytelling. Foer understands the deep connections of food to community and family; he also appreciates the connections food engenders between us and the natural world from which the food comes. Like Pollan, Foer is very much a character in his own story. But whereas Pollan presents himself as a modern Virgil to guide us through the confusing food world, Foer's focus is introspective. *Eating Animals* explains how to make ethical and thoughtful food choices in conversation with those dear to us. In some ways, the storytelling component is nothing more than the process by which Foer—and by extension anyone else—recreates the narrative of shared community around food. Thanksgiving without a turkey is still a holiday built around family gathering and just as enriching. This mode of public language manages to engage the substantive

149. FOER, *supra* note 7, at 194.

150. See Foer's comments during the debate on ethical eating with Frank Bruni in December 2009, *supra* note 67. See also FOER, *supra* note 7, at 32–33.

151. FOER, *supra* note 7, at 55–56. The argument is basically that while a vegetarian can simply inform a host that she eats as a vegetarian, an omnivore who wants to avoid the factory farming system probably has to further provide that host with places where non-factory farmed meat can be purchased.

arguments against factory farming while refraining from the advocacy that seems to rankle many listeners. Whether it persuades remains to be seen.¹⁵²

IV. A POST-MODERN *JUNGLE*: TWENTY-FIRST CENTURY ANTI-CAFO ADVOCACY

This Part offers some tentative ideas for a strategy to engage the public on the issue of CAFOs. It starts with a brief detour, reviewing the theory of cultural cognition, a recently developed synthesis of social psychology and anthropology.¹⁵³ Cultural cognition helps explain the limitations of certain types of advocacy in light of the claim that “cultural commitments are *prior* to factual beliefs on highly charged political issues.”¹⁵⁴ With this detour in mind, this Part looks back to the substantive arguments discussed in Part II and the efforts at persuasion considered in Part III to imagine what a Post-Modern *Jungle* might look like.

Combining questions of animal welfare, environmental concern, agrarian economics, and farm policy, the proper role and regulation of CAFOs surely tends towards the category of a charged political topic. Cultural cognition explains how *a priori* cultural beliefs about the world condition an individual’s perspective on a given topic: “[c]ultural cognition refers to the tendency of individuals to conform their beliefs about disputed matters of fact (e.g., whether global warming is a serious threat; whether the death penalty deters murder; whether gun control makes society more safe or less) to values that define their cultural identities.”¹⁵⁵ Indeed, cultural cognition suggests that these cultural commitments explain political beliefs more effectively than traditional liberal/conservative self-identification.¹⁵⁶ This theory rests on what Gastil and his colleagues describe as “an

152. This essay was originally written in January 2010, only three months after the publication of *Eating Animals*. Writing now in September 2011, it appears Foer’s following is nowhere near as robust as Pollan’s.

153. Professor Dan Kahan, along with various co-authors, has pioneered the work on cultural cognition—including a project on cultural cognition based at Yale Law School. See THE CULTURAL COGNITION PROJECT AT YALE LAW SCHOOL, <http://www.culturalcognition.net/> (last visited March 17, 2011). See also Dan M. Kahan & Donald Braman, *Cultural Cognition and Public Policy*, 24 YALE L. & POL’Y REV. 149 (2006).

154. Kahan & Braman, *supra* note 153, at 150.

155. CULTURAL COGNITION PROJECT, *supra* note 153.

156. See John Gastil et al., *The ‘Wildavsky Heuristic’: The Cultural Orientation of Mass Political Opinion* 21 (Yale Law Sch., Pub Law Working Paper No. 107, 2005), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=834264 (discussing results from study comparing the predictiveness of cultural worldview and political self-identification).

unassailable foundational insight” that “[m]ost Americans are thoroughly unengaged in matters political.”¹⁵⁷ Relying on the work of political scientist Aaron Wildavsky, cultural cognition theorists argue that “cultural worldviews of a particular sort decisively calibrate public opinion heuristics,”¹⁵⁸ with the consequence that “even citizens who earnestly consider empirical policy issues in an open-minded and wholly instrumental way will align themselves into warring cultural factions.”¹⁵⁹

Cultural cognition offers two insights for engaging the public on CAFOs. First, if cultural commitments are indeed prior to facts,¹⁶⁰ advocacy strategies that rely solely on individuals recognizing and properly weighing sound information—“the facts”—are bound to fail.¹⁶¹ Thus, the investigative journalist approach of Eric Schlosser or Gail Eisnitz seems unlikely to move those members of the public that do not already oppose factory farming practices. Similarly, Peter Singer’s line of ethical argument, even when more targeted towards food than animal welfare concerns,¹⁶² seems problematic. Second, and more hopefully, cultural cognition can inform advocacy in that “individuals are likely to resist factual information less if it can be presented in forms that affirm rather than denigrate their values.”¹⁶³ Just as political consensus coalesced around tradable emissions permits because it spoke effectively to both individualists and hierarchists,¹⁶⁴ framing concern about CAFOs in a manner compatible with individuals’ cultural commitments makes effective advocacy more likely.¹⁶⁵

It should briefly be noted that this essay assumes—as does the theory of cultural cognition—that people’s attitudes remain

157. *Id.* at 4.

158. *Id.*

159. Kahan & Braman, *supra* note 150, at 153. Cultural cognition follows Aaron Wildavsky and Mary Douglas in dividing cultural worldviews into four categories: hierarchist, solidarist/communitarian, egalitarian, and individualist. *See id.* at 151–53 (following MARY DOUGLAS & AARON WILDAVSKY, *PURITY AND DANGER* (1966)).

160. *Id.* at 150.

161. *See id.* at 165 (“Individuals can be expected to give dispositive empirical information the weight that it is due in a rational-decisionmaking calculus *only* if they recognize sound information when they see it. The phenomenon of cultural cognition suggests they *won't*.”).

162. *See supra* text accompanying notes 122–25.

163. Kahan & Braman, *supra* note 153, at 168.

164. *Id.* at 169.

165. *Cf. id.* at 151 (“The key to debiasing here is to frame empirical information in terms that make assent to it compatible with, rather than antagonistic to, the commitments of individuals of diverse cultural persuasions.”).

consistent over time. A second possibility exists: a sea change in thinking about CAFOs. The history of animal rights movements illustrates that such change is possible,¹⁶⁶ but interestingly also suggests that a moderate position often proves more effective in generating advocacy successes.¹⁶⁷ Thus, to the extent adopting a moderate position aligns with “fram[ing] empirical information in terms that make assent to it compatible with . . . the commitments of individuals of diverse cultural persuasions,”¹⁶⁸ the lessons from the animal rights movement is similar to those from cultural cognition theory.

If a post-modern *Jungle*—public argument that persuades the public of the ills of factory farming—is possible, it must eschew the rationalist language of Peter Singer and Eric Schlosser. While these forms of argument may motivate those who are already sympathetic, it seems unlikely they will move individuals more broadly. Avoiding explicitly rationalistic discourse is consistent with Upton Sinclair’s decision to advocate with a novel—that is, as a story teller. But simply because storytelling worked for Sinclair in 1906 does not mean that it will work again one hundred years later. Much depends on how that story is told.

Part II of this article suggests that the most effective story to tell is one of food. To the extent Congress has taken any action related to CAFOs recently, one can see the Food Safety Modernization Act of 2010 as evidence of concern with the safety—and to a lesser extent, the nutritional content—of food.¹⁶⁹ CAFOs as a threat to American food safety seem more likely to capture public imagination than stories about more politically charged issues like animal welfare or environmental concern. Invocation of other arguments against CAFOs discussed in Part II—worker safety and fossil fuel consumptions—may prove less contentious than animal welfare or environmentalism, but do not appear either to be as persuasive to the public at large or to lend themselves to particularly artful storytelling.

A twenty-first century *Jungle* that focuses on food also taps into

166. See generally DIANE L. BEERS, FOR THE PREVENTION OF CRUELTY: THE HISTORY AND LEGACY OF ANIMAL RIGHTS ACTIVISM IN THE UNITED STATES (2006) (describing developments and successes of the animal rights movement from 1860s through the twenty-first century).

167. *Id.* at 116 (noting that, in the evolution of animal rights activism in the first half of the twentieth century, “more moderate posture generated considerable public favor and culminated in promising, moderate victories”).

168. Kahan & Braman, *supra* note 153, at 151.

169. FDA Food Safety Modernization Act, S. 510, 111th Cong. (2010).

another mainspring of modern American culture: consumption.¹⁷⁰ Indeed, our societal focus on consumption suggests that public argument in the form of a consumer–persuader may prove the most effective storyteller. A story to fellow consumers about food and factory farming may strike a chord as we, as a society, redefine our relationship to consumerism early in the twenty-first century.¹⁷¹ If we want safe, healthy food and a meaningful consumption relationship, we should be deeply uncomfortable with factory farming.

Because such a post-modern *Jungle* would be a story about food told to consumers, there is no better storyteller than Michael Pollan. As noted in Part III, Pollan has already spoken extensively about the collapse of the American diet.¹⁷² In *The Omnivore's Dilemma*, Pollan described, in generally critical terms, the factory farming system.¹⁷³ But his discussion of CAFOs and factory farming makes up only part of a larger examination of the American diet. A more narrowly focused inquiry on factory farming in the voice of the Everyman may be able to capture the public's attention the way Sinclair did.

Of course, this essay does not suggest that Pollan himself should write a book about factory farming. A book may not even be the proper medium for a post-modern *Jungle*. This essay instead argues that an effort to persuade the public of the ills of the factory farming system would be most effective as targeted to consumers concerned about the safety, nutritional content, and taste of their food.

The theory of cultural cognition suggests an approach that that allows those of disparate cultural persuasions to make common cause. Given the array of diverse cultural beliefs—and divergent media sources attendant to those beliefs, crafting an effective approach is a tall order. Likely opposition from a well-organized “Big Ag” makes it even taller.¹⁷⁴ There is nonetheless hope for successful advocacy

170. See GARY CROSS, AN ALL-CONSUMING CENTURY: WHY COMMERCIALISM WON IN MODERN AMERICA 2 (2000) (noting that consumerism trumped other ideologies in the twentieth century in part because it “concretely expressed the cardinal political ideals of the century—liberty and democracy—and with little self-destructive behavior or personal humiliation”).

171. See *id.* at 15 (“[T]he history of our all-consuming century still suggests possibilities for new thinking and action—an appreciation for the meaning of goods in people’s lives with, at the margins, an awareness of the need to reform and revive the still valid portion of the culture of constraint.”).

172. See *supra* Part III.C.

173. See POLLAN, *supra* note 111, at 65–108.

174. See Marion Nestle, *The Food Dialogue: Big Agriculture Attempts to Reframe the Debate*, THE ATLANTIC (Sept. 19, 2011, 1:01 PM), <http://www.theatlantic.com/life/archive/2011/09/the-food-dialogue-big-agriculture-attempts-to-reframe-the-debate/245257/> (noting

challenging the factory farming system. This essay argues that framing this advocacy primarily about food and nutritional well-being is the most likely path to success. As Upton Sinclair understood after the publication of *The Jungle*, the path to the public's heart may need to travel through its stomach.

efforts by U.S. Farmer's & Rancher's Alliance (USFRA) to divert attention from deplorable conditions and unsafe and unhealthy practices in the U.S. food and agriculture system).