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Sellfare: A History of Livestock Welfare Commodification as Governance

Introduction. The commodification of livestock welfare has recently become a prominent topic of discussion among producers, retailers, nongovernmental organizations, policy makers, and academics. Welfare is increasingly considered "a win-win opportunity for animals, farmers and consumers," as the title of a 2012 conference organized by FAO and the Slow Food organization proclaims, since "farming practices that take into account high animal welfare standards guarantee greater productivity, better quality, more food safety and added value for farmers" (The Food and Agriculture Organization of the United Nations). Commodification is not expected to happen by itself, however. The European Union's 2012 animal welfare strategy, published at an event titled "Empowering consumers and creating market opportunities for animal welfare" (European Commission, "Animal Welfare"), propounds active "valorization of welfare standards as a means to enhance competitiveness of EU food industry" and attempts to seize "every opportunity to express in economic terms the value added by animal welfare policy" (European Commission, "Communication From the Commission" 4, 7).

The texts quoted above, and many others like them, are part of a process through which the production and sale of livestock welfare has recently become feasible. Operational welfare measurement systems have been developed for use in livestock production facilities (e.g., Blokhuis). A plethora of assessment, certification, marketing, and education schemes have been introduced (Schmid and Kilchsperger). Studies on the welfare market are proliferating (Norwood and Lusk 302–305). Together these developments enable the production of livestock welfare for sale, i.e. its production as a commodity (Marx, *Capital* 125-177).

This article studies the emergence of commodified livestock welfare. It shows that livestock welfare commodification has never been an exclusively economic phenomenon. Rather, it has been steered by attempts at purposive social coordination, here called governance. The article coins the notion "sellfare" to describe this complex of *livestock welfare commodification as governance*.

The article takes a historical approach to sellfare. It outlines a chronological history of welfare governance and welfare commodification. In so doing, it traces sellfare's contemporary aspects back to their circumstances of emergence. Sellfare thus appears as a complex of historical "layers," each of which has accumulated over a different time period. The article shows that many of sellfare's layers are quite old, but that they have only come together in the 1990s as commodified welfare.

The word "sellfare" itself combines three historical layers, each of which the article discusses in turn. The simplest and most long-standing of sellfare's layers is "fare," as in "how do you fare?" or "fare well." Fare refers to generic human concern for non-human thriving. The article begins by tracing such concern back to a contradiction within domestication. It shows why humans and "their" animals have never been able to journey (Old English *faran*) together without trouble.

The second historical layer contained within sellfare is "welfare." In this article, welfare refers to the well-being of industrially-produced non-human subjects as governed by a state-civil society dynamic. The roots of welfare lie in 19th century liberal fare governance. Welfare was only perfected, however, in the scientific regulation of the 20th century livestock factory. Up to the 1980s, welfare was a largely legislative instrument that worked by shielding livestock from some of the effects of their commodity status. The article outlines the emergence and development of welfare in sections four, five, and six.

The "sell" of sellfare, finally, connotes the addition of commodification as an instrument of welfare governance since the 1990s. For the first time in history, sellfare enables the mass production of scientifically-measured thriving for the purpose of selling it. Contrary to previous welfare governance, livestock suffering becomes a resource rather than a problem: public concern for livestock thriving now enables the sale of scientifically-certified welfare products. The article outlines the current form of sellfare in section seven. It concludes by reflecting on sellfare's future development.

To ground the analysis, the next section situates the article in previous literature. It reviews recent discussions on ethical consumption, welfare governance, and welfare commodification. Afterwards, the discussion turns to the article's central theoretical concepts, i.e. "commodification," "relation," "contradiction," and "governance," and the data used.

Approach and literature. During the past two decades, several bodies of social-science literature have emerged around topics that touch on livestock welfare commodification. The largest of these discusses what might be called ethical consumption (see Vitell; Röcklinsberg and Sandin). The ethical-consumption literature emphasizes themes such as performed identities (Schaefer and Crane), followed frames (Bateman, Fraedrich, and Iyer), consumption as voting (Shaw, Newholm, and Dickinson), limited possibilities (Barnett et al.), ideology (Žižek, *First As Tragedy* 51–69), and expressed preferences and conquered market failures (Norwood and Lusk). This literature is, however, by itself insufficient to account for sellfare, which also concerns production and governance.

More promising are inquiries into various stakeholders' attempts at livestock welfare governance. These include analyses of welfare in food policy (Bennett), industry responses to welfare demands (Adams), welfare in quality assessment and food chain transparency (Blokhuis et al.), welfare as a bridge between science and society (Blokhuis), welfare as a perpetuator of species privilege (Cole), attempts to construct an international trade regime for welfare (Hobbs et al.), and possible futures of welfare governance (P. Ingenbleek et al.). Freidberg, in particular, describes an "ethical complex" of nongovernmental organizations, media exposés, and retailers that governs the agro-food supply chain. These treatments do not discuss commodification as a form of governance.

The analyses closest to this article concern livestock welfare "commodification," "marketization," "economization," or "market policy." These works emphasize the factors that render welfare producible and salable at various points in the commodity chain. Buller and Roe, for instance, periodize the historical development of the British poultry market from marketization in the 1980s through differentiation, EU-imposed labeling, and finally choice editing by retailers. Buller and Cesar analyze the discourses of eating welfare produced by French food marketers. Miele and Lever highlight the role of welfare science in constructing a "civilized" market. A number of authors have also given political-economic rationalizations for state intervention in the welfare market (e.g., Harvey and Hubbard; Ingenbleek et al.). The existing analyses of commodification lack, however, the long historical perspective that is provided here.

This article adopts a Marxian understanding of commodification as *the process through which goods become producible for sale*. Commodities are defined as *useful products of quantities of average labor time that exchange with each other in ratios that are expressed by their prices* (Marx, *Capital* 125-177). Commodification thus requires that livestock welfare

become useful, producible, and salable. This is not a trivial requirement. Welfare commodification has many historical preconditions, including public concern, government intervention, scientific measurement, and certification. This article focuses mainly on the emergence of such conjunctural preconditions of welfare production, and less on systemic factors. In other words, the article belongs with the discipline of history rather than that of economics despite its focus on commodification.

Two theoretical concepts of Marxian historiography are of particular relevance to the discussion that follows. First, phenomena are here conceived as layered accumulations of historic *relations* (Marx, *Grundrisse* 105–106). The article shows how the relations that now underlie sellfare have emerged and developed. Second, relations may be contradictory insofar as their relata depend upon each other but also negate each other, such as with wage labor and capital. As contradictions build up, a phenomenon may become torn by multiple axes of contradiction that are internal to it and affect its development (Althusser 87–128). The article teases out five such relational contradictions of sellfare and its aspects.

In addition to Marxian vocabulary, the article draws on governance studies. "Governance" is here understood to mean purposive societal coordination through means such as hierarchies, markets, and networks (cf. Bevir 162–164). The concept can, furthermore, be disaggregated into historical periods or "hegemonic concepts of control" (Overbeek 7). One of these is neoliberal governance that, since its emergence in the 1970s (Harvey 51–108), has put a particular emphasis on utilizing hierarchies and networks to impose market-like relations as solutions to perceived problems. Sellfare is an effect of neoliberal governance that makes livestock welfare producible for sale on the market as a response to public concern over livestock welfare. It is thus not reducible to direct economic pressures, but also presupposes attempts at conscious regulation by non-market civil-societal and state actors.

The analysis is based on readings of secondary scholarship in English and German. In addition, less-researched recent developments are analyzed through publicly available documents on welfare commodification. This approach has several limits. Developments outside old core capitalist countries cannot be properly accounted for. The history presented here is also what some would call "teleological" (Woods, "From Cruelty to Welfare" 166) or "presentist" (Seidman), but what could equally well be called "reading the past from the present"s point of view." The article does not account for what could have been, what is no more, or what is dormant or minor.

A corollary limitation follows from the fact that the article is, in the words of Deleuze and Guattari, a taproot rather than a rhizome (5). Sellfare is the shaft at the center of the inquiry, and everything else is oriented towards it. Despite this, capital is not construed as a transcendent subject of history. The narrative here is more akin to *a history of beginnings*, in which phenomena and contradictions appear for whatever reasons (which are accounted for in a limited way) and then coalesce into capital and governance. It is only after many coincidences and co-options that sellfare emerges from a constellation of interspecies sensitivity, governance, science, and quality policy.

The Animal Connection and Domestication. The profound societal and individual significance of human relations with other animal species is well known. Livestock systems occupy approximately 30 percent of the world's ice-free terrestrial surface and boast an economic value in the trillions, a nutritional value in the tens of percentage points, a yearly death toll in the tens of billions, and substantial consequences for the environment and public health (Thornton; Steinfeld et al.). Companionship relations between humans and non-human animals are widespread, profoundly affecting the health, education, and social lives of those participating in them (Friedmann and Son). Large industries operate in fields like companion animal retail, grooming, health, nutrition, and insurance (e.g., American Pet Products Association). Non-human animals make prominent appearances in childrens' earliest vocabularies (P. C. Lee 194–195), religious texts (Bryant), metaphors (Talebinejad and Dastjerdi), and Rorschach test ink stains (Mason). Animal use has been subject to regulation in contexts as different as ancient Egypt, imperial Rome, and the European Union (Clutton-Brock; Li).

If widespread and active nurturing relations between humans and non-human domesticated animals did not exist, sellfare would not be possible. The existence of such relations is, however, far from self-evident. Paleoanthropologist Pat Shipman's search of the scientific literature only turned up one report of wild non-human primates adopting and nurturing individuals of another species (Shipman, "The Animal Connection and Human Evolution" 4). If other primates do not engage in interspecies domestication, why do humans? Shipman presents a coevolutionary animal connection hypothesis that, though fairly recent, partial, and somewhat controversial (7–14), is supported by a great deal of evidence from multiple disciplines (Hodgson and Helvenston; Helvenston and Hodgson; Budiansky 33–41; Zeuner 36–46). Relative to similar work that focuses less on the species relation (Mithen 256–259), Shipman's account is also well equipped to explain why animal suffering recurs as a societal problem and why humans often desire non-human animal thriving.

Shipman argues, based mainly on archaeological and fossil evidence, that the animal connection is a product of a long coevolutionary process in which humans and non-human animals have become increasingly entwined with one another (Shipman, "The Animal Connection and Human Evolution"). First, approximately 2.6 million years ago (cf. Domínguez-Rodrigo, Pickering, and Bunn), the utilization of stone tools began to move early members of the genus Homo into a predatory ecological niche. Prey- and predator-related knowledge started to become an adaptive advantage to early humans.

Second, beginning approximately 200,000 years ago, the importance of symbolic information, ritual, and transgenerational knowledge transfer as organizers of early human behavior started to grow. Much of the evidence of this development, such as ritual skulls, is non-figurative and thus difficult to interpret in terms of species relations. The content of figurative prehistoric art is telling, however: non-human animal themes are overwhelmingly common, whereas other potential topics such as humans, tools, landscapes, and plants are rare. Shipman interprets this as an indication of the importance of the storage of animal-related knowledge in the evolution of symbolic communication.

Third, beginning perhaps as early as over 32,000 years ago, humans domesticated dogs and then, beginning approximately 12,000–10,000 years ago, several other non-human animal species (cf. Larson et al.). Shipman reads domestication as an extension of previously evolved affinities and accumulated knowledge: the link between human and non-human animals was now sufficient to take the animal connection to a new level. She characterizes the process of animal domestication, as opposed to plant domestication, as follows:

> Because we have the potential to communicate much more directly with animals than with plants, the process of domesticating an animal is much more intimate, personal, and psychologically powerful. I suggest that the process of domesticating an animal is basically the process of creating a genetically encoded potential for a mutual language or communication system, based on a set of shared values. (Shipman, *The Animal Connection* 197)

According to Zeder (239–50), the domestication process of different non-human animal species probably took various shapes: some scavenged their way into human society, others turned from wild prey into managed herds, and some were purposefully

adopted by humans. All of the non-human animals that ended up domesticated were, however, to some extent pre-adaptively compatible with human society in terms such as social structure, sexuality, and dietary propensities. There were often adaptive benefits to domestication in forms such as biomass provision and conversion, surplus storage, security, and labor. Domesticated non-humans were also protected from extinction, which was the fate of many of the species on which early humans preyed (Barnosky). By 2500 BCE, all of the most important contemporary domestic species were found in some societies (Clutton-Brock 77). Earlier species boundary practices such as predation, spiritual reverence, and artistic use were complemented by new practices of caring, breeding, and production.

The evolutionary trajectories of all of the involved species were affected by the process of domestication. Domesticated animals came under constant selective pressure from humans, whereas humans were selected for traits that facilitated dealings with domesticates and their products. As a consequence, domestic animals and humans grew increasingly dependent on each other. Contemporary domestic breeds often retain juvenile characteristics of their species to adulthood exhibiting, among other traits, pronounced gregariousness, submissiveness, and non-aggressiveness, as well as reductions in wariness, response to stimuli, brain size, and capacity for certain kinds of problem-solving (Smith and Litchfield; Gepts et al. 232–239). The bodies, minds, and cultures of humans have also become further attuned to domestic breeds' products, diseases, communication, emotions, and behavior (O'Brien and Laland). Despite these adjustments, problems such as zoonotic diseases, dietary drawbacks (Cordain), and mutual violence have continuously plagued the species boundary of humans and domesticates.

Shipman's animal connection hypothesis describes the emergence and persistence of the reciprocal conditionality of humans and domesticates. This societal and bodily connection emerged together with a degree of mutual intersubjectivity. Without this intimate connection there could be no sellfare. The existence of sellfare could even be considered as indirect abductive evidence for Shipman's hypothesis.

Shipman's hypothesis has, however, a second, equally important implication for an analysis of sellfare. The animal connection arguably internalizes a contradiction between *sensitivity* and *instrumentality*. On the one hand, the connection evolved out of (and into) a need for mutual understanding, bodily dependence, and jointly structured social relations. On the other hand, it evolved out of (and into) the often instrumental

and inherently asymmetrical relations between predator/prey, domesticator/ domesticated, and labor/means of production. In some ways, human and non-human domesticates are of the same whole; in other ways, their relations are permeated by violent enactment of difference. Human recognition of non-human suffering is a corollary of abuse, as Anna Williams has argued.

The contradiction internal to the animal connection is arguably the main reason why non-human thriving in the face of human usage has engendered concern throughout written history (Preece). This old, generic form of human concern for non-human thriving is here called "fare" for short (cf. Buller and Cesar). Generic fare only exists, however, in historically specific relations. As the next section shows, for example, fare and its governance were altogether different in the 18th and 19th centuries than they are today.

The 18th and 19th Centuries: the Emergence of Liberal Fare Governance. Although the animal connection and its regulation are truly ancient, sellfare is more specific than any animal connection and any regulation. Sellfare consists in entities such as states and civil-societal actors publicly valuing and manipulating the thriving of a population of animals. The preconditions for this *liberal fare governance* layer of sellfare first emerged during the 18th and 19th centuries, when fare became part of a regulatory process of public debate and governance. This section describes the emergence of the mediatized state–civil society dialectic of liberal fare governance, presents an integrative interpretation of its conditions of possibility, and discusses its relationship with contemporary sellfare.

The analysis pulls together three explanatory strands from the literature on 18th- and 19th-century fare governance. First, what could be called the *humanitarian* strand concerns changes in the emotional and moral aspects of the animal connection. Second, the *governance* strand focuses on the changing role of the animal connection in societal coordination. Third, the *modernism* strand emphasizes human perceptions concerning, and capacities for, rapidly manipulating themselves and their environment.

The backdrop of liberal fare governance is formed by the process of capitalist modernization that culminated in the 18th and 19th centuries. This process transformed the relationships among the public sphere, the state, and the market in parts of Europe and its imperial sphere (Habermas). Technological developments in the relations and forces of production instilled confidence in the human capacity to intervene in non-human and human constellations. Contractual relations and notions of far-reaching

causal culpability proliferated, implying a heightened sense of moral responsibility (Haskell, "Capitalism and the Origins of the Humanitarian Sensibility, Part 1"; Haskell, "Capitalism and the Origins of the Humanitarian Sensibility, Part 2"). Science increasingly emphasized the unity of life, and humans were either demoted to animals or glorified with characteristically human traits (Franklin 25–26). Morals, knowledge, and mettle came together at the elite-exclusive, bourgeois public sphere of newspapers, salons, parliaments, and societies (Fraser, "Rethinking the Public Sphere"). The ills spewed forth by the "satanic mills" (Polanyi 41) of capitalism came to be governed through a mediatized process of civil society-state interactions. This process is taken here to be the defining characteristic of liberal governance.

Non-human animals were embroiled in the metamorphosis of society that modernization entailed. Beginning in the 17th century, animals were increasingly produced for sale as commodities, or "live stock" (Hribal 438). Concern for them was famously mediatized in William Hogarth's mid-18th century commercial pamphlets that denounced the horrors and moral consequences of animal cruelty (Kalof 124–164), proffering the commonplace modern depiction of animals as the helpless objects of human gaze and depredations. Practices changed alongside representations: pets became prevalent conduits of demonstrative consumption and class affiliation (Brantz 78–79), rendering many humans subject to the affectations of idle non-humans. The harsh lives of commodified animals at the hands of their working-class handlers remained visible, however, in cattle drives, traffic, and print.

The 19th century saw the creation of societies that attracted influential members with words like *vegetarian, vivisection, Tierquälerei* [animal abuse], and *protetrice* [protection] (Guither 1–5; Zerbel 1–82; Kete, "Animals and Human Empire" 3). These sought publicity, lobbied for legislation, and sometimes also enforced regulation that the police and magistrates were unable or unwilling to implement (Favre and Tsang). National animal laws increased in number, regulating behaviors such as "publicly or scandalously torturing animals" (Second German Reich, 1871) and "shameful, indecent treatment causing scandal in a public place" (The Russian Empire, 1864) (Hardouin-Fugier 176). The property status of non-human animals was universalized, and practices of legally punishing animals disappeared from Europe and the U.S. by the end of the 19th century (Ritvo 1–5; Legge and Brooman 37).

The notion of *public cruelty* was central to early liberal fare governance. An important reason for this is to be found in old elite anxieties that were now increasingly targeting

the proletariat (Kelch, "A Short History of (Mostly) Western Animal Law: Part 1"; Kelch, "A Short History of (Mostly) Western Animal Law: Part II"): Witnessing and partaking in cruelty was thought to have a dangerous effect on the working class (Crossley 35), that beastly Other of the composed modern gentlefolk. Early British animal protectionists, for example, took themselves to be in the business of the "suppress[ion] of dangerous elements of human society" (Kete, "Animals and Human Empire" 2). Influential social reformer Jeremy Bentham argued that "habits of cruelty" and "antisocial propensities" ought to be "repressed" by only allowing the infliction of non-human suffering on respectable grounds (which his utilitarian theory supplied) (Bentham). In France, the proponents of the 1850 anti-cruelty Grammont Law successfully appealed to the elites' fresh fear of the underclass after the uprisings of 1848 (Kete, *The Beast in the Boudoir* 4–7).

The practical implementation of 18th- and 19th-century fare governance included state-sponsored children's anti-cruelty education in France (Stock-Morton 184), activists patrolling the streets as law enforcers in the U.S. (Favre and Tsang 15–17), and the military suppression of cruel entertainment in Britain (Turner 138–139). Unsightly and unclean slaughter was increasingly concentrated within large, municipal compounds that were hidden away from urban centers (A. J. Fitzgerald). A similar process was underway for animal markets by mid-19th century (Philo 666–670). The livestock system was being civilized (cf. Tester 66).

The scope of fare governance expanded towards the end of the 19th century. Steam-powered animal transport grew explosively and was governed, in some countries, for both sanitary and sentimental reasons (Woods, "From Cruelty to Welfare" 15; Council of Europe Publishing 177–178). Regulation continued on slaughterhouses, the conveyor belts of which reputedly inspired Ford Motor Company employees to perfect the iconic auto assembly line (P. Y. Lee; Horowitz 37). The scientific clout of animal experimenters continued to balloon, and anti-vivisectionists achieved their first legislative victories. In some cases, the opponents of vivisection allied with anti-positivist, aristocratic, and ecclesiastical elites that resisted the increasing authority of the empirical sciences (Bromander); in other cases, with socialists and feminists (Lansbury). Value and other forms of power flowed ever faster through an ever larger number of non-human bodies, channeled by the criticism that was often integral to them.

In sum, the 19th century saw the emergence of a crucial aspect of sellfare: the governance of fare within a mediatized state-civil society dialectic. Scandalous public exposés and various forms of fare intervention came to complement each other. Liberal

fare governance also began to subtly change the motivation of animal regulation. It increasingly treated animals as subjects whose sentiments were valuable as such, yet simultaneously used them to affect human populations. The contradiction between non-human animals *as a means and object of liberal fare governance* emerged. This contradiction is often mistaken for straightforward benevolence, such as when Kelch argues that modern law "protected animals for their own sakes" ("A Short History of (Mostly) Western Animal Law: Part II" 3) as opposed to older religious and economic reasons. Such formulations overemphasize the degree to which non-human animals have ever been the sole object of liberal fare governance.

At the end of the 19th century, a number of 21st century sellfare's aspects were still missing. The mechanized, capital-intensive, cramped livestock rearing factory was absent, although branches of livestock production did increase their productivity substantially (Federico 71). One of the most important objects and contexts of today's welfare governance and sellfare was thus lacking. Governance rarely concerned animal husbandry, rather focusing on transport, slaughter, and entertainment.

Animal thriving was also not reliably measurable. Although scientific interest and knowledge concerning animal emotions and behavior did emerge particularly towards the end of the century (e.g., Darwin), these were not yet institutionalized as disciplines. Scientists working with living and healthy animals were a minority compared to those using dead or dying ones (Burkhardt 1–126). Laboratory environments for studying and manipulating animal behavior and emotion were nearly non-existent (cf. Gray).

Perhaps most importantly, however, the governance device of animal "welfare" itself was absent. The first echoes of welfare governance could certainly be heard in notions such as "happiness" and "suffering," but it was not possible to operationalize these existing conceptual tools for the manipulation of animal thriving in production. Although some socialists and feminists began to include non-human animals in their demands (Kean), the emblematic *Wohlfahrtsstaat* [welfare state] of late 19th century Germany was for humans only (Petersen and Petersen).

It would be overly bold to claim that sellfare was impossible at the turn of the century, but the requisite technoscience, governance devices, and production conditions were nonetheless still largely absent. To produce livestock welfare for sale would have been excessively difficult. To encourage such production through policy was inconceivable.

Many phenomena that are important to contemporary sellfare only emerged or consolidated during the 20th century.

The Early 20th Century: Livestock Factories and Welfare Governance. Systems for raising substantial numbers of livestock in cramped conditions already existed in the 19th century. One might cite, for example, late 19th century urban dairies (Woods, "From Cruelty to Welfare" 17), large pig sties (Malcolmson and Mastoris 72–87), and feedlots (Cronon 223–224) as such. On the whole, however, various types of outdoor production and relatively small-scale indoor systems dominated livestock husbandry. It is difficult to pin down why this began to change precisely when it did, in the early 20th century. A general causal analysis of the industrialization of livestock husbandry should certainly mention late 19th century technological developments like fermented silage fodder becoming common (Wilkinson, Bolsen, and Lin) and easing seasonal feed availability variations (Federico 10), the growing viability of refrigerated railroad cars for meat transport (White), and the propagation of agricultural economics, education, and statistics (Runge). Towards the end of the 19th century, increasing affluence among parts of the world's population resulted in the demand for livestock products growing faster than supply (Federico 26–28). The vertical integration of farming increased and lobbyists consolidated (Franklin 130–135). In some cases, such as the agro-industrial revolution of the U.S. Midwest, these factors came together with astonishing consequences (Page and Walker).

Regardless of the specific etiology one opts for, it is beyond doubt that in the first half of the 20th century, new kinds of livestock production systems emerged from the broader process of fertilizer-, combustion-, credit-, and modernism-inflamed agricultural industrialization (D. Fitzgerald). The novel systems kept animals at increasing densities, were increasingly mechanized, specialized, capital-intensive, or indoors, and competed on an equal footing with more extensive systems. It was only in the second half of the 20th century, however, that various kinds of livestock factories began definitively to eclipse other production systems (Norwood and Lusk 42–43; Blokhuis 19–26). Total agricultural workforces plummeted by up to 80 percent between 1938 and 2000 in Western Europe, while fixed capital stocks remained stable or expanded (Federico 42–64).

The spread of livestock factories exacerbated the contradiction that was already inherent in animals as commodities (Gunderson, "From Cattle to Capital" 267). An exploding number of affective beings were now reduced to commodities and hidden from the consumers of their flesh, deepening the dialectic of alienation and exposé that

had begun in the 18th century. The ascendancy of livestock factories was sealed by antibiotics and interventionist state policies that emphasized food quantity and structural change in agriculture (Winter, Fry, and Carruthers 312). The subsumption of animals into commodities was far from perfect, however, and production systems varied with region and species.

From the start, some proponents of livestock factories argued that intensive indoor systems in fact benefited animals by protecting them (Woods, "Rethinking the History of Modern Agriculture" 174–176). Such claims were forcefully challenged with the onset of the tumultuous 1960s. Books like *Silent Spring* (1962) in the U.S. and *Animal Machines* (1964) in Britain sparked controversy around the moral, ecological, and societal consequences of intensive livestock production (Carson; Harrison, Carson, and Dawkins). These were soon translated into numerous languages. Livestock factories increasingly transitioned from the producer's private sphere to the sphere of public concern. As a British government official noted in 1964, "a sort of Factories Act for animals" seemed worth considering (quoted in Woods, "Rethinking the History of Modern Agriculture" 18).

It is in this environment that livestock welfare governance began to consolidate in post-war Britain, from whence it gradually spread across the Anglophone hegemony. According to Woods, references to livestock "welfare" surfaced in British debate during the 1950s (Woods, "From Cruelty to Welfare" 15–16). At this point, "welfare" still connoted livestock thriving in a generic and non-specific sense. A specific meaning only developed after the British Ministry of Agriculture, Fisheries and Food mandated a group of scientific experts "to examine the conditions in which livestock are kept under systems of intensive husbandry and to advise whether standards ought to be set in the interests of their welfare, and if so what they should be" (Brambell 1).

This so-called Brambell committee's influential 1965 report, in some ways reminiscent of factory inspectors' reports from a hundred years earlier, embraced an understanding of welfare as "both the physical and mental wellbeing of the animal." The welfare status of an animal, it argued, could be known through "scientific evidence available concerning the feelings of animals that can be derived from their structure and functions and also from their behavior." The rapporteurs considered welfare compatible with intensive production and even useful to improving productivity (Brambell 9, 63).

Livestock welfare passed into British law in 1968, and much of the Ministry's policy was rebranded under the new moniker (Woods, "From Cruelty to Welfare" 18–19). That same year, the European Convention for the Protection of Animals During International Transport was opened for ratification carrying numerous references to "welfare" (The Council of Europe). During the treaty process, "welfare" was translated verbatim into the languages of the participating nations. Forms such as "Wohlbefinden" [wellbeing], "benessere" [wellbeing], and "gerove" [welfare] were given precedence over previous vocabularies such as the German "artgerecht" [species-appropriate].

Woods gives a number of possible reasons for why "welfare" was adopted in British livestock legislation (Woods, "From Cruelty to Welfare" 18–19), some of which are also applicable to welfare's spread to other national contexts. The reasons can be combined and reformulated into the following three items: First, it would have been controversial for the government to imply that "cruelty" or "suffering" existed in livestock factories. Second, "welfare" evoked the condescending Christian sensibility of *caritas* [charity], but also suggested a connection with the fashionable welfare state. Third, cruelty policy was traditionally the remit of the Home Office, which is why Agriculture, Fisheries and Food was eager to construct itself a new domain in welfare policy.

Woods' account (Woods, "From Cruelty to Welfare" 14) consciously omits one very important reason for welfare legislation: "Animal welfare" had the benefit of being previously familiar from the rhetoric and research of the animal experimentation lobby, such as the Universities Federation for Animal Welfare (founded in 1926 as the University of London Animal Welfare Society) and the Animal Welfare Institute (founded in 1951 in the U.S.). Welfare had also made a legislative appearance in 1966 in the U.S. when a Laboratory Animal Welfare Act had been adopted after a media scandal around animal research (Adams and Larson).

In sum, the early 20th century saw the emergence of two important aspects of sellfare: livestock factories and scientific livestock welfare governance. Two other aspects were still missing in the 1960s, however. First, animal welfare science consolidated largely *after* scientific welfare governance. Animal welfare was not widely accepted as a scientific concept at the time of the Brambell committee (Broom, "A History of Animal Welfare Science" 124), and little academic infrastructure existed for it. Although animal behavior had become a respectable and feasible object of science since the emergence of ethology and comparative psychology in the first half of the century (Burkhardt), these disciplines were dominated by approaches that were strongly skeptical of non-human mentation (Rollin) and thus rendered questions concerning welfare difficult to answer.

Second, the notion of scientific livestock welfare as a product quality attribute was still inconceivable. Welfare as quality only became intelligible as a result of a broader societal transformation that began after the 1960s. The last part of the article discusses the way in which these two developments, animal welfare science and welfare quality, emerged.

The Late 20th Century: Welfare Science and Quality. As early as 1947, a laboratory animal handbook of the Universities Federation for Animal Welfare promoted a "realistically humane policy based on objective fact" (quoted in Haynes 8) that would draw on research into non-human animals' contentment and pain. At the time, however, such knowledge was virtually non-existent. The Federation began sponsoring research for the benefit of laboratory animals and sound experimental design in the 1950s (Kirk 250–252). Agricultural science departments also began using the influx of post-war productivist policy funds to study the associations of livestock fare and productivity (e.g., Sandilands). Developments of this kind explain why, when ethologist W.H. Thorpe of the aforementioned Brambell committee reported to the British government in 1965, he already had a literature to draw on, even if this was not a welfare science literature as such.

Scientific attention truly turned towards animal welfare in the 1970s amidst growing public concern. Rigorous definitions, valid indicators, telling indices, and robust causal relations were constructed to ground concepts such as those mentioned by Thorpe (e.g., Duncan and Wood-Gush). During the 1980s, something like a disciplinary orientation was gathered under the notion of measurable welfare (Dawkins; Blackshaw; Broom, "Animal Welfare: Concepts and Measurement"). This was followed by rapid increases in publications and institutionalization in the 1990s (Lawrence 5–8). The scientific literacy of stockpeople, among other characteristics, came to be seen as an important guarantor of the welfare and productivity of intensively-produced livestock (Hemsworth and Coleman vii-viii).

The consolidation of welfare science rendered it, as Alistair Lawrence describes the development of his discipline, less "curiosity driven" and more "policy driven," and hence perhaps more "efficient" at promoting welfare (Lawrence 4). One reason for this was probably that welfare science was directly funded and steered by policy drivers. In its second Framework Programme between 1979 and 1983, the European Communities in particular emerged as one of the most important supporters of welfare science. An EC Commission report from 1986 rationalized the funding as follows:

> The pressures of the market-place have resulted in most animal production systems becoming more intensive in an effort to hold products at price levels acceptable to consumers, while, on the other hand, public opinion pressure (not always well informed), which is against certain aspects of modern systems, has been building up. Scientific answers are needed to help avoid the impasse of these two pressures meeting head on. (Commission of the European Communities, *Coordinated Agricultural Research — A Record of Achievements* 28)

As welfare science entwined with policy, it was also inflected by the factories it was tasked with reforming. Husbandry systems and industrial practices, such as debeaking or tail docking, became a common starting point for welfare research (Cunningham; Stookey and Goonewardene). Welfare science became a component in what could be called protectionist scientific welfare governance: A loosely science-based, largely legislative form of governance that utilized subsidies and restrictions to govern mass-produced animals so as to manage the reduction imposed upon them. Words like "Schutz" [protection], "skydd" [protection], and "suojelu" [protection] commonly replaced or accompanied welfare vocabularies under variants of such governance (EU Enforcement Network for Animal Welfare Lawyers and Commissioners).

Even as protectionist welfare governance was solidifying, however, some of its foundations were being undermined by the very circuit of value it was structured around. The relatively unfettered governments of the post-war accumulation regime were being restrained by liberalization, with capital picking up speed, covering ground, and coercing into competition. Butter mountains were growing as symbols of the inefficiencies of state intervention under fluctuating markets. State-produced public goods were appearing increasingly bland and uniform in comparison to private production, especially as firms were pushed towards product differentiation due to the saturation of markets for mass-produced goods (Streeck). Quality management systems spread copiously (e.g., Kelemen) from their seedbed in warfare and manufacturing. Post-modern citizens were being encouraged to take responsibility for themselves in the spirit of self-service democracy (Eriksson and Vogt).

Protectionist livestock factory legislation was slowly complemented by minor forms of market-based governance. Livestock product quality certification systems, such as the French government's *Label Rouge* [red label] (1960s) and the private *Scharrel* [free range] (1970s) in the Netherlands, acted as explicit higher-standards alternatives to livestock

factories and legislation (Schmid and Kilchsperger 233–240). Although some of these early initiatives coupled commercial benefits with various notions of fare, their advantages were mainly identified with increased productivity and tastier or safer products (e.g., Bieleman 279; Fanatico, Born, and Conner). Welfare was not yet for sale as such. Welfare science was not yet capable of robustly abstracting livestock welfare into a single index in the mid-1980s (Blackshaw).

The 1990s and Onwards: The Birth of Sellfare. By the mid-1990s, European livestock production and its governance had changed visibly from the post-war situation, and the outlines of sellfare were readily discernible. "Mad cow disease" was endemic in the media. Deteriorating consumer perceptions of the safety and quality of industrially-produced food (e.g., Alvensleben), together with the associated fall in food prices, were driving demand for standards. Agricultural certification systems were multiplying rapidly (Areté 4), and welfare had become central to several of these (e.g., Neuland). Liberalization was incentivizing the creation of new market-based and "multifunctional" policy instruments such as the organic system (Huylenbroeck and Durand 1–83; Vogel). Private and state actors were building new consumption spaces alongside and inside productivist intensification (Potter and Tilzey 584). The EU's agricultural policy focus was on quality over quantity (Commission of the European Communities, COM [85] 333 Final, *Perspectives for the Common Agricultural Policy* [*Communication of the Commission to the Council and the Parliament*]), and research funding was being directed towards discovering how to best produce welfare for sale (European Commission, *Ethical, Legal and Socio-Economic Aspects of Agriculture, Fisheries and Food Biotechnology. An Overview of Research Activities 1994-2002 — Programmes Fair and Biotech [FP4] Quality of Life Programme [FP5]* 28,34). By the end of the decade, EU legislation had classified non-human animals as sentient.

Since the 1990s, sellfare has expanded rapidly and left its mark on a wide spectrum of phenomena. Numerous product labels and brand strategies have integrated welfare components (Schmid and Kilchsperger). A voluminous academic and report literature on welfare markets and supply chains has emerged (Miele and Lever; Brook Lyndhurst Ltd.; Gracia, Loureiro, and Nayga), a substantial portion of it directly or indirectly driven by state actors. Operational welfare measurement and certification systems have been developed, the most prominent of these being the massive 14-million-euro EU project Welfare Quality® (Blokhuis) that is now in the process of being adopted by many private and government initiatives. The demand, supply, and "transparency" of sellfare have been supported by education aimed at the regulators, assessors,

consumers, and producers of welfare (Schmid and Kilchsperger; Kilchsperger, Schmid, and Hecht; Evans et al.). Celebrity chefs have allied with non-governmental organizations for "high welfare and a fair deal" (Compassion in World Farming). Trained welfare assessors have begun touring production facilities in order to link marketable welfare claims with production practices and animal indicators (Roe, Buller, and Bull). Efforts at international standardization have been made, sometimes with the explicit purpose of facilitating welfare trade (Thiernmann and Babcock). Private, third-sector, and state bureaucracies have begun cultivating commodified welfare and addressing the manifold practical difficulties that derive from the abstraction and rationalization characteristic of it.

Despite its consolidation, sellfare is far from stable and universal. There is substantial variation among regulations, proficiencies, attitudes, and interpretations everywhere within sellfare (Kjaernes, Miele, and Roex; Spoolder et al.), all of which must be mitigated to some degree as welfare is abstracted into a freely exchangeable commodity. For example, Norwegian empty nesters in Welfare Quality® focus groups didn't trust product labels (Evans and Miele 85). They also felt that welfare should be state- rather than market-regulated, that they did not know enough to arbitrate on welfare, and that the killing of welfare animals remains problematic. Comparable moments of cognitive dissonance are undoubtedly still the norm rather than the exception within sellfare. Expert certification and education are needed to set minds at ease. Even with such efforts, however, consumers' willingness to pay for welfare products remains rather limited. Although potential and actual welfare premiums (Gracia, Loureiro, and Nayga; Norwood and Lusk 258–352) or market shares (Schulze) may in some cases reach tens of percentage points, they are still low enough that some aspects of welfare production remain hard-pressed to meet all consumers' intuitive understandings of "welfare."

Miele and Lever have argued that sellfare may, despite its failings, improve the welfare of livestock by drawing attention towards it and by preparing ground for future progress (Miele and Lever). The same process, however, also has a reverse side: sellfare is not only promoting welfare, but also adjusting it. Welfare Quality®, for example, consulted citizens and experts for a definition of welfare. The resultant definition would have ranked half of European livestock production units as "unacceptable," so it was watered down in the final solution (Miele et al. 115). Other cases in point include the welfare gas and electrocution chambers of the industry-funded WelFur system (Mononen et al. 368) and the Freedom Food system's welfare CCTV cameras for slaughterhouse laborers (Royal Society for the Prevention of Cruelty to Animals). It is

hardly surprising, then, that before economists can conduct willingness-to-pay experiments on welfare products, they must correct their subjects' understandings of what welfare means in the context of the livestock industry (Norwood and Lusk 258–352). Commodified welfare is differentiating itself from non-commodified welfare, and adjusting the latter in the process.

In addition to redefining welfare, sellfare also relocates the welfare question from the sphere of the citizen to that of the consumer. Consumers are now "voting every day in favor of products that have implemented these animal welfare standards," as ex-Commissioner John Dalli proclaims in a video of the EU's welfare campaign, "Everyone is Responsible" (DG Health and Consumers). The contradiction between citizen and consumer is, however, difficult to paper over. By way of example: people prefer and vote for laws that prohibit whole classes of animal products, producing public rather than private goods (Norwood and Lusk 342). They bid differently in public-good welfare auctions than in product auctions (258–352). They express greater welfare interest in surveys (European Commission, *Attitudes of EU Citizens towards Animal Welfare*) than at supermarket counters. The consumer-citizen is a beast riven by a contradiction that cannot be dissolved by re-education. Some people will, furthermore, refuse both interpellations. This is why coercive apparatuses such as Europol's anti-terrorists (Europol, *TE-SAT 2011. EU Terrorism Situation and Trend Report 2011* 22) or the public-private "Joint Forces Against Violent Animal Rights Extremists" (Europol, "Joint Forces against Violent Animal Rights Extremists") must stand ready.

Conclusions. As has been shown above, sellfare inherits four contradictions from earlier historical configurations and gives rise to a fifth. The first contradiction, between sensitivity and instrumentality, has plagued the human-non-human animal boundary since the emergence of the animal connection. This contradiction has frequently given rise to fare, i.e. human concern for non-human animal thriving. It was only in the 18th and 19th centuries, however, that fare came to be manipulated through the mediatized state–civil society dialectic of liberal fare governance. This gave rise to the ongoing contradiction between subjectivized animals as a means and object of liberal fare governance.

After the Second World War, livestock factories exacerbated the contradiction inherent in animal commodities. Public spectacle followed, and states responded with scientific livestock welfare governance. Governance helped steer welfare science in a policy-driven and factory-centric direction. In the 1990s, scientifically-measured welfare

entwined with agricultural quality, consolidating livestock welfare commodification as governance and internalizing a contradiction between consumer and citizen at the heart of sellfare.

Although sellfare is a continuation of several long historical processes, it differs from older modes of governance that do not encourage the production of welfare for sale. It subjects livestock welfare directly to competition and compels producers to manufacture welfare as cheaply as possible. Sellfare thus encourages the reduction of welfare into its commodity aspect, repeating the process that is at the root of welfare problems in the first place. Unlike protectionist governance, sellfare also confronts livestock suffering as a resource rather than as a problem. As Ryan Gunderson puts it in his critique of ethical food, "the very same mechanisms that cause capitalism's discontents are marketed as their own remedy" ("Problems with the Defetishization Thesis" 6). Finally, sellfare shifts the responsibility for livestock suffering from states and producers to consumers. This shift is part of a broader development in food governance that Julie Guthman (264) calls a "neoliberal anti-politics that devolves regulatory responsibility to consumers via their dietary choices."

Sellfare is not static, however. Its constituent parts are constantly in flux. If, for example, recent desensitization technologies such as *in vitro* [outside the living body] meat and the reduction of livestock sentience through genetic manipulation prove viable (cf. Shriver), sentient livestock may become obsolete. This would likely dissolve the contradiction of sensitivity and instrumentality that sellfare depends on. Desensitization has, however, proven vulnerable to public scandal around "franken-meat" (Boyle and News) in ways that sellfare has not. The irony becomes palpable when one recalls WelFur's electrocution chambers.

Even if consumers find sellfare preferable to desensitization, the skeletons in sellfare's closet are haunting enough that resistance is to be expected. Policy-driven welfare science is particularly open to accusations of treating livestock as a means rather than an object. Criticism does not, however, necessarily challenge sellfare or its aspects. As Slavoj Žižek points out, subjects need not believe or accept a notion for it to function; they only need to act according to it (*The Sublime Object of Ideology* 28–30). Even if the imperfections of welfare production were suddenly widely recognized, consumers might be inclined to blame themselves and demand more expensive welfare products rather than question sellfare as such.

One possible form of resistance to sellfare's responsibilization of consumers is to re-emphasize the citizen aspect of welfare governance and call for a return to legislation over commodification. This answer would be in line with the cries for global Keynesian democracy (Patomäki) and emancipatory protectionism (Fraser, "A Triple Movement?") that have become fashionable of late. Although protectionism is unlikely to dissolve sellfare's contradictions, it may improve the prospects for governing some of them. Empowered governments could, for instance, more effectively steer consumption away from animal products by combining welfare measurement with other policy tools (cf. Vinnari and Tapio). This theme cannot be fully pursued here, but a thorough discussion of protectionism and sellfare is worthy of future inquiry.

Whatever path sellfare takes, one thing is certain: sellfare's complete *undoing* is unlikely. The technology for rendering welfare interchangeable with other abstract measurables will not go away. New vistas for both centralized and dispersed coordination are open, for good or for ill. Value and other forms of power now flow through sentient beings in ways that were previously inconceivable. Consider, for example, the recent interest in measuring and governing human well-being (Davies). When read together with sellfare, this gives rise to as-yet unexplored possibilities of human welfare commodification. Here, too, the application of power trumps its abolition.

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