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An Ecofeminist Politics of Chicken Ovulation: A Socio-Capitalist Model of Ability as Farmed Animal Impairment

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Abstract

Through a combined ecofeminist, and critical disability philosophical analysis of the commodification of female farmed animal reproduction, the paper conceptualizes *ability* as a socio-capitalist construct that can carry the potential for harm. Patriarchal farmed animal capitalism relies upon the idea of naturalized ability of farmed females to be hyper-reproductive/hyper-ovulatory/hyper-lactative. This paper frames the introduced condition of hyper-ovulation in “egg” hens, or the amplification of their ability to lay through selective breeding, as reproductive impairment, and an act of violent patriarchal commodification and capitalization of female reproduction. Impairment, then, functions not just as disability, but also as *ability*. Focusing on our rescued chickens, the paper argues that such intentionally bred hyper-fertility manifests for individual hens in its least harmful form as chronic illness with the likelihood of everyday pain and inflammation, anxiety, and metabolic hunger; and in its most harmful form as a life-threatening condition. It then examines the subversive ecofeminist politics of using contraception for chickens in a fraught attempt to restore a closer pace of avian ovulation cycles that existed prior to their selective breeding. In allowing infertility to be restored to hen bodies, chicken contraception highlights the *disappearance* of intentionally introduced reproductive impairment to materialize the patriarchal-capitalist *ableist* construct of hens who *naturally* ovulate daily. Ideas of normal and natural can also thus operate in the service of *ability*. Ultimately, the paper positions the infertile hen as central to a fuller feminist resistance to the governance and control of the female reproductive body.

Vignette 1: *Lila did not look quite right. The gentlest and quietest of our hens rescued from an egg farm, she seemed more reticent than usual, and her face seemed screwed up in discomfort, perhaps even pain. Was it possible for a chicken’s face to get screwy in that way? Did chickens even have facial expressions? My husband and I were in the nascent stages of caring for rescued hens, and I, in the embryonic stage*

of what would become an all-consuming absorption in feminist animal studies. Immersed in the unselfconsciously normative anthropocentrism of our lives, we were yet unaware of the profusion of work on animal emotions (King 2018), including of chickens (Marino 2017) and indeed, their facial expressions that signalled their rich and diverse emotional lives. We were yet to dare to permit ourselves to consider that, and the extraordinary extent to which, animals other than humans—including birds—also keenly felt, experienced, knew, and understood.

As Lila started to withdraw from food, we made an appointment with an avian veterinary specialist in Melbourne. He palpated Lila's abdomen, and said briefly, "She is full of eggs." Eggs? Laid inside a chicken? Through X-rays and an ultrasound, he confirmed a large mass of unshelled eggs in her coelom or body cavity. Lila had begun open-mouth gasping by then and drinking copious amounts of water, a definitive sign, he said, of severe distress, if not debilitating pain, in birds. Lila was immediately scheduled in for emergency surgery, where the obstructions in her oviduct would be removed, and flushed off months of "cooked" eggs, anecdotally referred to as such by rescuers and vets, for the boiled-yolk consistency of the mounds of egg material thus extracted. Lila would then be implanted with a contraceptive chip to ensure that she stopped laying—or ovulating—thereafter. But she was already not laying—or so we had assumed. Eight months prior, Lila had laid one shell-less egg the day after her liberation from the farm, and then never again. She seemed happy, bonding in a familial flock, and feeling the wind, the sun, and the dirt for the first time in her life.

Little did we know that, as a modern, domesticated hen, bred expressly to hyper-ovulate for humans' egg consumption, Lila was, in fact, doomed to never stop laying. When Lila's overworked reproductive system started to fail, at an estimated 12–18 months of age (when egg farms typically send hens to slaughter), she had in fact, been continuing to lay—albeit internally.

Diagnosed too late, Lila died ten minutes into her surgery.

Vignette 2: The avian vet expertly flipped Sultam, the queen of our little rescue flock, upside down in her arms, and parted the feathers around her cloaca for a routine inspection. "Wow!" she exclaimed, a little louder than usual. I hurried over to her to look. The vet pointed at an extremely swollen and inflamed, dark red cloaca, throbbing slightly as the vet gently probed and pressed at it. I flinched at how painful it looked. Sultam was one of our healthiest hens, or so we had thought. "That's from the pressure and exertion of laying eggs daily," said the vet. "You could apply an anti-inflammatory ointment. But really, she just has to live with it."

Introduction

This paper presents a social model of *ability* as carrying the potential for harm for the purportedly *abled* body, through an ecofeminist focus on the female farmed animal, bred to be hyper-reproductive. Patriarchal farmed animal capitalism relies upon the idea of naturalized *ability* of farmed females to be hyper-reproductive/hyper-ovulatory/hyper-lactative. Cows for instance, are believed to *naturally* lactate vast quantities by the milk-consuming public, though in reality, bovines have been selectively bred to hyper-lactate for dairy consumption and capitalism, at severe risk of injury

and death (Narayanan 2018). This paper focuses on the bred condition of hyper-ovulation or hyper-fertility in the modern “egg” chicken, an anthropatriarchal control of female reproduction at the genomic level, which causes them to ovulate or lay an egg almost every day of the year. Most birds, including chickens, typically ovulate in spring for species propagation (Iglesias and Ruiz 2013), and thereafter—crucially—experience a long, extended period of infertility. Selective breeding of chickens for eggs has compromised their capacity to ovulate seasonally and be infertile for the rest of the year.

This paper positions this condition of hyper-fertility in hens as deliberately introduced reproductive impairment into the female body, resulting in profound physical and psychological pain and suffering for chickens: chickens’ hyper-ovulation is embodied in its least harmful form as a chronic gynecological condition manifesting through everyday cloacal (akin to pelvic or vaginal) pain, inflammation, anxiety, and metabolic hunger; and in its most harmful form as a pervasive life-threatening condition. A focus on farmed animals reveals that impairment can function as much in the oppressions of *ability*, as disability. Such patriarchal commodification and capitalization of female reproductive ability are serious concerns for feminist disability philosophy, and feminist animal studies.

The paper introduces the female nonhuman animal reproductive body, specifically the hyper-ovulating hen body, as central to feminist philosophical interest in “the reproductive body’s turn” (Weingarten 2019). It deepens older feminist concerns about the patriarchal commodification and capitalization of reproduction, through a sustained ecofeminist focus particularly on ovulation. Ovulation *per se* is a necessary precursor to reproductivity. The commoditization of ovulation through hyper-ovulation specifically, is a unique form of reproductive exploitation that is imposed upon female farmed animals. In the case of “egg-laying” chickens, it is their ova—or eggs—the product of their ovulation itself, that is the commodity.

Feminists have emphasized the urgency of focusing on individual stories and realities as patriarchal resistance; as Berenstain (2020, 734) writes, “Conceptually severing individual instances and broader patterns of discrimination, violence, and oppression from the larger structures that produce them is a linchpin of structural gaslighting.” In focusing on our individual chickens, rescued from egg farms and chicken slaughterhouses, the paper responds to feminist animal geographer Kathryn Gillespie’s (2014, 1323) call for a “‘global intimate’ animal geography” where the embodied realities of individual animals in farms, slaughterhouses, markets—but also sanctuaries and vegan rescue homes—reveal the hidden workings of the global animal agriculture economy itself. The empathetic witnessing of their lived realities necessitates an ethical and political response (Gillespie 2016), illuminating new insights and emphasizing urgent interventions for feminist politics that challenges the control and commodification of female reproduction. As Adams (2007, 201) reminds us, “caring about and emotionally responding to this suffering can be appropriate sources of knowledge” and theory, and these are vital to a fuller accounting of a multispecies feminist politics of justice and liberation.

Our care for the hens necessarily required responding to the genomic manipulation of their reproductive capacities to be unceasingly ovulating, allowing no possibility for seasonal female avian infertility. This paper thus complicates the subversive ecofeminist politics of using contraception for chickens in a fraught attempt to restore a closer pace of avian ovulation cycles that existed prior to their selective breeding to alter these rhythms. “Chicken contraception” is an implant (originally developed for ferrets but unexpectedly successful in avian species) that the veterinarian inserts into the backs

or breasts of hens, to allow them to experience an ovulation cycle similar to their ancestor, the Red Jungle Fowl, not experienced by hens for hundreds of years. While their species is bred to lay 250–300 eggs a year (Davis 2019), the implanted chickens would lay about 5–10 eggs over a one- to two-week period annually, when the implant wore off. They would then return to the vet for another contraceptive implant. This process of contraceptive implantation for hens prompts a range of questions—some practical and mundane, and others conceptually important for developing a deeper, multispecies theorization of *ability* and *disability*.

What does it mean, for feminist disability politics, to regard a chicken as reproductively impaired, and to draw attention to her pain and suffering as a result of such introduced impairment? What can we make of the use of contraception for a strategically bred “egg” hen as an intervention for reproductive impairment? Is such intervention a “longing” for an undamaged past? In *Brilliant imperfection*, Eli Clare (2017) reflects on his discomfort and confusion at prairie restoration attempts which seek to return to the state before colonization decimated the tall grass landscapes for corn and bovine farming. The rehabilitation of the impaired ecosystem is a project of “curing,” implying then its current disabled state as a “defect.” Is the project of “restoring” a chicken through contraception implicitly suggesting her impairment as a “flaw” or “deformity”? In doing so, does a model of disability politics for farmed animals inevitably clash with or undo critical liberatory disability politics in the human context? Is the use of contraception in rescued hens merely a “cure” for their impairment? Such “cure” is clearly not feasible for the billions of chickens globally bred and hatched for their eggs, so what political function, precisely, does the implanting of a few rescued hens perform?

The paper argues that the political value of chicken contraception lies in its potential for understanding a socio-capitalist model of *ability* as also profuse with harm. Patriarchal farmed animal capitalism constructs, values, and is sustained by, ableist ideas of what farmed females can do naturally and normally, revealing how “natural” and “normal” can also operate in the service of *ability*. A focus on the farmed body shows how a socio-capitalist model of ability, wherein the sociology of human-to-animal relations is acutely shaped by capitalism, reveals the harms of gendered ableism. If as Morris (2001) writes, a social model of disability allows human rights to be recognized—including women’s reproductive rights—then problematizing a capitalist-social model of naturalized *ability* of farmed animals (to be hyper-productive) is vital for animal rights and justice.

The paper expands critical feminist theories of disability (Wendell 1989) through an ecofeminist theory of *ability*. It extends the exposing of “white feminist gaslighting” that deploys conceptual framings (e.g., race, class) to muddy the real connections between oppressive practices, and harm to racialized bodies (Berenstein 2020), to what we may understand as *anthropocentric* feminist gaslighting that denies, negates, or trivializes the reproductive, sexual and gendered exploitation of farmed bodies. Milk and eggs constitute what Carol Adams (2010, 305) calls “feminized protein [which] is taken from living female animals, whose reproductive capacity is manipulated for human needs.”

The paper thus specifically contributes to study of egg-laying hens in feminist critical disability studies (CDS), and feminist animal studies, in particular taking a different view on their “rehomeing” and ongoing exploitation as egg producers in urban backyards when ostensibly rescued from commercial egg farms (Oliver 2021). Through its focus on the politics of chicken care and rehomeing in a vegan home,

the paper exemplifies how “situated knowledge” of chicken medical care is generated through a differentiation of species identity as perceived in specific geographies (Rosenfeld 2021, 16), and indeed, through the self-reflexive praxis of being *human* in shared hen-human worlds, following Gillespie’s call (2021, 3) for an “*anti-anthropocentric*” approach in multispecies autoethnographic reflections.

Ultimately, the paper concludes that for a fullest feminist liberatory politics that is free from even empathetic ecofeminist exercise of power over (female) animal bodies, the cessation of the selective breeding of farmed animals, and animal farming itself, is vital. This does not imply the extinction of the species but the extinction of the *commodity*, allowing new possibilities for one of the most domesticated and subjugated species to become sovereign and autonomous. This would involve commitment to a vegan ecofeminist political praxis, further research on “the environmental tolerances” of the ancestral breeds of chickens in current geologic times to understand such sovereignty (Pitt et al. 2016, 1), and respect their freedom to form their own social and kinship relations through reproduction (and equally, through the freedom to not reproduce), parenting, and other intra-species socializations and care.¹

The paper is structured as follows: the next section articulates a theoretical framework of *ability*, bringing together feminist CDS and feminist animal studies. It then provides an overview of the rationale of selective breeding of chickens to have hyper-ovulating reproductive systems to serve the egg industry. Thereafter, the paper develops an empirical section that details the reproductive issues faced by our rescued hens, and our decision to place them on contraception (Figure 1). Last, the paper examines and complicates chicken contraception as a “cure” to such patriarchal control and commodification of female reproduction.



Figure 1. Sultam, the flock leader, looks on. At this point in mid-2017, she had already been implanted for a year © Yamini Narayanan).

An ecofeminist philosophy of impairment as ability

Through a focus on farmed female nonhuman animals, the paper contributes to critical feminist philosophy by framing *ability* as also an oppressive concept and practice with the potential for profound violence for the ostensibly *abled* body. A social-capitalist model of ability undertakes at least three types of politics for feminist and animal CDS philosophy: (1) it frames impairment as also causing the harms of *ability*, where ideas of the “natural” and “normal” abled body serve as oppressive mechanisms; (2) it examines such *abling* impairment, or impairment that amplifies or accelerates existing ability through selective breeding, as a singular exploitation experienced by farmed animals for patriarchal capitalism; and (3) it offers a potential pathway in addressing the tensions that emerge between liberatory *human* and liberatory *animal* philosophy in calling a farmed animal disabled. This latter concern has posed conceptual challenges to the possibility of alliances between disability and animal rights movements.

Disability rights movements, and CDS scholarship have distinguished disability from impairment. Impairment is a value-neutral term that describes bodily features, while “disability” ... refer(s) to the disabling barriers of prejudice, discrimination, and social exclusion” imposed on persons with impairment (Morris 2001, 2). Disability stigmatizes or pathologizes neurobiological diversity as “defective,” “abnormal,” or “unnatural,” disregarding the myriad ways in which humans live, move, and exist in the world (Clare 2017; Taylor 2017; Wendell 2001). CDS politics challenges the often-automatic equation of impairment with pain and suffering, which suggests a state of pitifulness or abjection of the impaired person, and/or reinforces ableist fears and stigmas around impairment (Clare 2017). CDS argues therefore for a social construction of disability that locates disability in society rather than the body (Clare 2017; Wendell 2001), in other words, rightly locating the responsibility for the social oppressions of disability in a closed-minded society that is unwilling to accommodate impairment.

Feminist CDS has critically extended and complicated several of these concerns, pointing out that even impairment, particularly in the female reproductive body, is not value-neutral. Tremain (2006, 36) explains impairment as “a relatively recent medico-juridical category that operates in the service of normalization” of how a body is deemed impaired—and therefore controllable/governable. The governance of women’s sexuality, reproduction, and reproductive choice have been central to the formation and securitization of the nation-state and the market (Bracke 2017). In the case of the female reproductive body, genetic science and reproductive technologies define “the naturalization and materialization” of foetal/prenatal impairment in utero, for instance (Tremain 2006), playing a pervasive and invasive role in even determining and naming what is reproductive impairment at all, leading to “commodification [and] differential valuation of foetal life” (Mills 2016, 289).

Crucially, this knowledge and capacity shapes health, state, and market policies, through “medico-juridical” definitions of “normal” and “natural” about the female reproductive body (Tremain 2006). As Eli Clare (2017, 173) writes, “The standards called normal—sometimes in tandem with natural—are promoted as averages. They are posed as the most common and best states of being for body-minds.” These standards are not scientific conclusions but shaped by social subjectivities and limitations. In *Medical entanglements*, feminist scientist Kristina Gupta (2020, 21) argues that the institutionalization of a malfunctioning, abnormal, diseased, or impaired human

body more broadly is in fact solidified through a set of “sexist, racist, heterosexist, classist, and ableist norms” (Gupta 2020, 28).

To Gupta’s list, it is important to add *speciesist* norms that also determine ideas of what is natural—or indeed, *abled*—about female reproduction. If patriarchy is a “kind of transnational biopower invested in controlling women’s bodies” (Takeshita 2012, 24), then it metastasizes into perhaps its most extractive and violent form as what I have previously called “Anthropatriarchy, or a meta-patriarchal ordering of society constructed around human gendered exploitation of nonhuman animals [that] is essential to sustain all animal agriculture” (Narayanan 2019, 198). Adams reminds us that the violence of patriarchy “has been inscribed through *species inequality* as well as human inequality” (Adams 2007, 202, emphasis added). As I have reflected before, “Anthropatriarchy extends beyond patriarchy in the total ownership of living animal bodies as resources; their reproductive systems, germplasm and ovum, labor, familial relationships, and their genetic material itself are human property.” (Narayanan 2019, 198).

What does such a pervasive scale of control of the female nonhuman reproductive body, to the extent of intentionally impairing its functions to serve consumption and capitalism, mean for the politics of disability? Disability in hens as other human and nonhuman animals, may certainly accompany aging, environmental factors, and inherited ancestral genetics (Wendell 1989) (though this is rarely the case for farmed animals who are slaughtered as infants, and not usually allowed to experience the impairments of age). However, what of impairment that is willfully introduced into the farmed body? Is the impairment experienced by the genomically altered hen, cow, or pig a “disability”? Recounting her observation of chickens crammed into a truck headed for slaughter, critical disability and animal studies scholar Sunaura Taylor (2017, 21) writes, “the hens were virtually all disabled.” Taylor then asks (2017, 22, 38), “what does it mean to say that an animal is disabled ... [and] what does it mean to speak of a healthy/normal chicken ... when they are bred to be disabled?”

Taylor’s troubling question points to the tension in naming an animal into whom impairment has been bred—arguably an act of injustice—as disabled, thus re-associating disability with negative connotations. How can *bred* impairment be conceptualized, and the injustices associated with farmed animal impairment properly addressed, without strengthening the narratives of “defect” or “abnormality” that sustain human oppressions? As Clare (2017, 56) asks: “how do we witness, name, and resist the injustices that reshape and damage all kinds of body-minds—plant and animal, organic and inorganic, nonhuman and human—while not equating disability with injustice?”

Disability, as Taylor (2017) notes, is not only a social construction but also, a *human* construction. In the case of farmed animals, the consequences of the pervasive modification of their body parts and functions through selective breeding—often by impairing them altogether—is best understood not necessarily through a social model of disability, but a socio-capitalist model of *ability*. *Ability* best describes how impairment is not made hyper-visible as in the case of humans, but is fact rendered hyper-*invisible*. Impairment is disappeared altogether, by being ignored or not noted as impairment and rather, normalized as biological ability.

The bred condition of hyper-fertility in hens, then, speaks directly to feminist concerns about “biopower’s normalizing strategies” to define and control what constitutes impairment (Tremain 2006, 53), but equally importantly, also imply what is *not* impairment. Their unceasing, almost year-round fertility and ovulation has become such a naturalised facet of egg production that the notion that this is in fact specifically a manipulated impairment of chicken ovaries and oviduct becomes bewildering. In fact, chicken

reproduction is a phenomenon of such totalizing control that, regardless of the site or scale of the egg farm—battery, free-range, or suburban backyard—it is the relentlessly hyper-ovulating body of the modern hen itself that is the site of the oppressions of *ability*.

Impairment, when neglected as such, and rather, actively and intentionally exploited instead as ability or naturalized as able-bodied, also functions as oppression and violence. If disability as oppression takes no account of impairments and *excludes* impaired persons from mainstream society and economy (Morris 2001), ability as oppression *also* takes no account of impairments but *includes* them into the mainstream for profit and exploitation. Impairment shapes the pathologization of disability for humans, and the normalization of *ability* for farmed animals. *Ability* too then, can be seen as located in (human) society and economies, rather than in farmed bodies.

Their resultant vulnerability, suffering, and fatal risks are not recognized as ethically or politically relevant. Women, for instance, suffer more when the pain and suffering of impairment is ignored (Wendell 2001). In the case of farmed animals, “the only crucible of vulnerability to pain and suffering, as policymakers perceive, is the slaughterhouse,” though birds, who compose the most numerous of all farmed species, are excluded from even this consideration (Somers and Soldatic 2020, 41). However, as Jones writes (2016, 558), “A pain-centric model of disability does three things: centralizes lived experiences of pain, demands both medical intervention and disability accommodations for that pain, and critiques both medicine and accommodations through the insights of social-constructionist approaches.” Highlighting the pain that farmed females routinely experience for the human consumption of their “feminized protein” is core to clarifying a socio-capitalist model of ability that addresses the nature and consequences of animal exploitation at the genomic level. This is rarely addressed in animal welfare or even rights discourses, the focus usually being on the treatment of such individuals already born, rather than breeding them to be so in the first place.

Selective breeding for eggs: reproductive control and the hyper-ovulating hen

Chickens are the most numerous farmed land animal: approximately 65 billion chickens are raised and slaughtered each year for meat and about 80 million metric tonnes of eggs (Lawal et al. 2020). This human demand for cheap feminized protein operates as a naturalized interdependence of life under capitalism, through the large-scale and highly contested subsidization of animal agriculture (Silbergeld 2016). The sheer mundanity with which “eggs” pervade human lives obscures the singular lives of these sentient beings bred as commodities, and their ecological histories and formerly sovereign states of being “wild.”

The domesticated chicken (*Gallus gallus domesticus*) is a descendent of the Red Jungle Fowl (*Gallus gallus spadiceus*), the “main ancestral species” (Lawal et al. 2020, 1), who were domesticated and interbred over hundreds of years with “both RJF subspecies and other jungle fowl species” in South and Southeast Asia (Wang et al. 2020). The selective breeding of chickens over the years has led to four major types of chicken breeds for production, i.e., “egg-type, game, meat-type and Bantam ... represent[ing the] major evolutionary branches of chickens” (Moiseyeva et al. 2003, 403). The Red Jungle Fowl is “now highly endangered in its true wild form” (Pitt et al. 2016).

Egg production has particularly driven the logics of chicken breeding in the last 50 years (Tixier-Boichard 2020, 2), which seeks to amplify “a variety of traits associated with egg production” (Bain et al. 2016, 330). The trait of the wild Red Jungle Fowl who ovulated on consecutive days in spring and laid in “clutches” became amenable

to the making of the super-ovulating domesticated hen. The reproductive system of a female bird composes the ovary and the oviduct (Jacob [n.d. A](#)). Ovulation occurs when an ovum is released from the ovary into the oviduct upon maturation, where the albumen and eggshell are formed (Jacob [n.d. A](#)). Jacob writes, “The total time a hen’s body takes to transform a yolk into a fully developed egg and lay that egg is about 25 to 26 hours.” A hen lays in clutches or “group of eggs laid by a hen on consecutive days” (Jacob [n.d. A](#)). This natural trait of daily ovulation in *short and limited seasonal timeframes* would be subject to accelerated rates so as to make their reproductive systems almost incessantly fertile, throughout the year.

Studies on the wild Red Jungle Fowl across Nepal, India, Thailand, Vietnam, and Laos where they are native, note that the hens laid eggs in the dry weather (Collias and Saichuae [1967](#)), where it was likely that one hen might lay for a few days, and then rest for a period (Jacob [n.d. A](#)). The historical accounts of chicken scientists record that indigenous hens in Bengal, India, laid about 40 eggs a year (Haodon [1945](#)). If the eggs were fertilized by a rooster, an act that occurs before the hen lays, then it would take approximately three weeks for the chicks to hatch (Jacob [n.d. A](#)).

This capacity of a bird to lay in clutches was amplified through selective breeding of the hybrid “egg” hen whose “clutch” now composes about 250–300 eggs. The modern hen typically ovulates *at least once a day*, and some 300 times *a year*, a rate of ovulation that exceeds historic avian ovulation by approximately 3000 percent. In “egg” chickens, Bain et al. (2016, 332) write, “the biological limit of one egg per day for example has virtually been achieved at peak production.”

Selective breeding for eggs manipulates hens’ reproductive systems to ovulate *earlier*, and lay *heavier* eggs, forcing abnormally large eggs from their cloaca every day. As Alabi (2019, 36) writes, “Ability of egg-type chickens to start laying earlier in life is a desirable trait that commercial poultry farmers always look forward to achieving.” Selective breeding also seeks to ensure that the eggs weigh at least 60 grams, “maintaining egg weight at or around this level for as long as possible,” eventually increasing individual egg weight to 65.5 grams when the hen is 50 weeks old (Bain et al. [2016](#), 332). In sum: the number, weight, *and* size of the hen’s ova have exponentially increased.

Responding to these harms that chickens experience due to selective breeding can itself become a way of marketing the eggs as meeting ethical standards, making “animal bodies into ethical biocapital” (Twine [2010](#), 146). Breeding scientists suggest that better feed may address some problems (Bain et al. [2016](#)). Breeding companies are also exploring the development of the “long life layer,” where the hen will be allowed—or endure?—another 30 weeks of “long life,” to lay more eggs. Bain et al. (2016, 330) write, “The ‘long life’ layer, which will be capable of producing 500 eggs in a laying cycle of 100 weeks, is ... on the horizon.” However, even the dubious possibility of an extended lifespan—which also means the extension of multiple sufferings—can only be feasible if the quality of eggs laid by these “long-lifers,” and the albumen quality is maintained (Bain et al. [2016](#)). The response of genomic science is not to question selective breeding, but to do it *differently* (Twine [2010](#)), i.e., in a manner that does not lead to a loss of egg production.

Thus it appears possible to extract *more* eggs from hens. Selection criteria determine the limits of selective breeding, or in other words, the limits of their impaired reproductive systems, determined by the quality of eggs, and the laying life of the hen, ostensibly a nod at animal welfare. Tixier-Boichard (2020, 2) writes, “In theory, selection may reach a plateau when all favourable alleles [variations of particular genes, and only so many variations of a gene are possible for a fixed population] have reached fixation. Yet, current data for poultry show that the selection response can still take place

after 50 generations or more ...” In other words, selective breeding is not just a scientific but also a subjective decision. Breeding can be intensified by changing the set of criteria deemed acceptable, including modifying or removing animal welfare standards that impede production. As Tixier-Boichard (2020, 2) writes, “Biological limits induced by extreme performance can be by-passed by adapting the breeding programme, introducing new selection criteria, changing the management or developing remedial technologies.”

And so the moment passes where the hen, who is at the heart of selective breeding, might be considered for more than her (re)production potentials. Nonetheless, some of these hens radically disrupt the patriarchal imaginary that sees them as egg commodities, when they find themselves liberated from normalized sites of violence and exploitation in farms, into vegan rescue homes, in spaces of care with humans. New ways of knowing and knowledge-making about the hen emerge when “knowledge practices [become] forms of intimacy” (Wiegman 2010, 83). The suffering of hens as egg producers generates an ethical, political, and medical accounting that prioritizes the hen subject, rather than the egg commodity.

Chronic egg-laying as chronic and/or fatal reproductive/gynecological impairment

On the morning of the tenth day of the liberation of Rhea and Lila, I opened the door to their coop to let them out. Surprisingly Lila walked out first after a few moments; usually this cautious chicken allowed Rhea to take the lead each morning. Minutes later, Rhea appeared, extremely slowly, feathers puffed and ballooned out so much, making this emaciated hen appear almost three times her size, eyes tightly shut and completely hunched, curled inwards. Horrified, I rushed her to the avian vet. “What sort of eggs has she been laying?” he asked. The couple of eggs she had laid since her arrival, were whole but somewhat misshapen, a sign, I had not known, of any number of severe reproductive issues. Rhea was so far gone overnight that she barely responded to his examination. She was euthanized in my arms, in the sunlit surgery at the back of the clinic.

We grieved immensely for Rhea’s death, mourning that she had so little time to experience freedom after having lived her life as a battery hen. Inexperienced at that stage with chicken care, we took Rhea’s death as an individual case, not yet properly knowing to associate chicken health with the egg-laying. Already at the time of Rhea’s decline, there were brewing issues in our other chickens that we were yet to recognize as significant. We would lose two more hens to “repro” issues (as experienced fellow chicken rescuers would refer to them), before we finally learned that it would be a matter of time before our other hens potentially developed reproductive issues directly due to the fact that they were laying so prolifically, including but not limited to: ovarian cancers, cloacal prolapse (when the inner tissues of the cloaca collapse out), egg yolk peritonitis (colloquially known as “internal laying”), dystocia (inability to expel eggs, or egg binding), impacted oviduct, and neoplasia (abnormal growth of cells which could be malignant or benign). There could be other indirect, prolonged, and also fatal suffering due to hyper-laying, including severe feather pecking and cannibalism due to stress, even in suburban or urban backyard farms (Jacob n.d. B). These deaths would eventually give some insight into the possible causes for Rhea’s death.

At an estimated eight months of age at the time, Rani, for instance, laid regularly, but her eggshells felt noticeably thin, despite us supplementing their feed with every

nutritional variety that we could think of—her own eggs and eggshells, kale, broccoli and spinach for calcium, cashews, hazelnuts and walnuts, seeds, and seashell grains. Avian veterinarian Sharman Hoppes (2015) writes, “Usually, these birds are chronic egg layers, and calcium deficiency (resulting in misshapen or soft-shelled eggs) is a factor.”

Thin or misshapen eggs, such as those laid by Rhea, are common reasons for egg farms to send hens—including indeed Rhea—to the slaughterhouse from where she had been rescued. The high rate of egg-laying causes calcium deficiency, resulting in the spontaneous bone breakage of young hens (Bain et al. 2016). While eggshells are treated as garbage by human consumers, they are crucial to constituting the egg commodity. Thin-shelled eggs cannot be transported for sale as they “do not fit well into a typical egg carton or are more likely to break during transport” (Jacob n.d. A). Hens are thus “replaced,” i.e., slaughtered, at 72 weeks (Bain et al. 2016, 331).

We were unaware that calcium deficiency due to chronic egg-laying was placing Rani at rapid risk of peritonitis or internal-laying like Lila, or dystocia. Dystocia can lead to an impacted oviduct, which can become filled with albumen and eggs with soft or misshapen shells that stick to the oviduct wall and congeal (Hoppes 2015). “Clinical signs are depression, anorexia, distended abdomen, and possibly dyspnea [difficulty in breathing]” (Hoppes 2015), signs that Rhea had demonstrated towards the end. Hens are also the only nonhuman animal who “spontaneously develops ovarian cancer with a high prevalence” due to their introduced capacity to “ovulate prolifically” (Johnson and Giles 2013: 432). ISA Brown and Leghorn hens, who are prolifically used in global commercial laying, have “the highest mortality rate” (Alabi 2019, 36), as compared to subspecies of chickens who ovulate less.

These realities of the pain and suffering of egg-laying hens are generally absent from feminist resistance, social justice outrage, anti-violence, and anti-capitalism narratives. Chickens in particular are almost so fully objectified, and excluded from moral consideration that, as chicken ethologist Lori Marino (2017) notes, most people are surprised to register them as even birds. As the world’s most numerous species, this is hardly due to unfamiliarity with them; rather, the geographies where chickens are found—farms and slaughterhouses—and their use as consumable objects “interacts with perceptions of their intelligence.” As Marino (2017, 127) writes, “Unlike many other birds, chickens are categorized as a commodity, devoid of authenticity as a real animal with an evolutionary history and phylogenetic context.” Chickens experience advanced emotions including boredom, happiness and frustration, “demonstrate self-control” (thereby potentially demonstrating self-awareness), and even exhibit basic arithmetic proficiency; Marino concludes (2017, 141) that chicken are “behaviorally sophisticated, discriminating among individuals, exhibiting Machiavellian-like social interactions, and learning socially in complex ways that are similar to humans.” Indeed, their physiological experience of pain, together with their rich emotional worlds, create their suffering, when they are treated utterly as commodities.

We would soon learn in a visceral way that chickens might also suffer psychological trauma, often manifested through variations in their consumption of food. Despite the profusion of high-calorific items like banana oats, fresh corn, and boiled sweet potato, Rani’s keel bone along her breast would remain as sharp as a knife. Later when we implanted the chickens, we would be shocked at the immediate drop in the volume of food they ate while finally gaining weight. While hormones from the contraception might contribute to the weight gain, hyper-laying chickens, we learnt, *could not gain weight*. Avian ovulation is calorie-intensive, energy-burning labour. As Walzem and

Chen (2014, 199) write, “ovulation is the first step in the energy-intensive process of egg formation.” It is virtually unknown or unrecognized that “egg-laying” chickens exist in a constant state of metabolic hunger and remain under-weight as a result of chronic laying.

Miller loved food—or we thought she did—more than the others. We did not know that chickens—like humans—might eat to self-soothe. Hens routinely suffer “abnormal *nervousness* and *hysteria*” (a misogynistic deployment of the terms used to describe fertile women, and indeed, hens) caused by hormonal imbalance, and aggravated by the conditions of egg farms (Hansen 1976, 531), a behavior so common that it may not be noticed as a concern. Perhaps as a traumatized response to her constant hunger in the egg farm, Miller had been stress eating so indiscriminately that that she had eaten 14 metal screws, a shocking discovery we made at the vet’s when she became sick. We discovered that it was common practice for builders in Melbourne to bury waste construction material into the ground at the completion of a project. However, while the other chickens had noticed but not eaten the screws, Miller who insatiably used food for comfort, had swallowed several. Despite an immediate three-hour surgery to extract the foreign material, Miller died 13 days later of a cardiac arrest.

Chronic egg-laying in birds, is in fact considered a serious medical issue even by veterinarians when a bird lays “repeated clutches or produce larger than normal clutch sizes, regardless of the presence of a mate or appropriate breeding season” (Clinical Veterinary Advisor 2013). The Clinical Veterinary Advisor (2013) elaborates, “Chronic egg laying birds are often predisposed to the development or occurrence of egg binding, egg yolk coelomitis, salpingitis, metritis, nutritional depletion, and osteoporosis.” Arthritis, chronic pain, fatigue, and inflammation are generally common symptoms of chronic illness (Jones 2016). The hens’ spontaneous bone breakages due to calcium deficiency, their constant metabolic hunger, and even their mental distress and anxiety that becomes apparent in contrast to their calm *after* they are placed on contraception, can justify describing the modern hen as being afflicted by “chronic illness.” As Wendell writes, conditions can be considered chronic when

they are understood to be illnesses that do not go away by themselves within six months, that cannot reliably be cured, and that will not kill the patient any time soon...when they require prolonged medical treatment or surveillance, or when patients must fear recurrences because there is no reasonable expectation of cure. (Wendell 2001, 20–21)

Specifically, it is possible to think of chickens’ incessant egg-laying as a *gynecological* impairment. Feminists argue that endometriosis must be considered a chronic gynecological disability, given the abdominal, pelvic, and vaginal pain associated with the condition (Jones 2016). It would not be a stretch to consider that hyper-ovulation with the potential for associated *cloacal* swelling and pain, such as what Sultam experienced, or what might have been Lila’s abdominal pain from internal laying, can also be considered a chronic gynecological or reproductive issue. After Lila’s death, we would wonder if her quiet, timid nature might have been actually due to chronic abdominal pain.

After losing three chickens in quick succession, we looked urgently for better ways of caring for the remaining hens. Our vets and experienced members of an international vegan group for liberated chickens produced the same solution—contraceptive implants for the hens, which would produce a length of seasonal infertility when they would not ovulate at all. Vets suggest an implant when a chicken presents with reproductive trouble, due to the high cost of implantation—approximately AUD\$300 per implant per

chicken, which might last between three and eight months, and a hen might need two to three implants annually. However, the chicken rescue community advocates, where possible and affordable, implanting even supposedly “healthy” chickens, because they view hyper-ovulation itself as a reproductive issue. Chicken sanctuaries, notes Rosenfeld (2021, 11) can be “anti-natalist”; they “pull different threads from naturecultures to reorient chickens’ presents and futures: they make claims about health and healthy chickens that consider their present biological lives and how these are intertwined with hegemonic political economy.” The political economy of veterinary expenses, combined with the sheer scale of hyper-fertile hens needing rescue *and* medical rehabilitation can be prohibitive, though the moral uneasiness may persist that individual birds may *want* to reproduce (Rosenfeld 2021). Our vets agreed that implantation is the healthiest choice for the hens, a course of life-saving treatment that also becomes profitable to veterinarians.

It is worth taking a moment to consider the radical politics of care in allowing female individuals of *any* farmed species to experience infertility, a routine facet of the cycle of ovulation. In being rescued from egg farms *and* rehomed with vegans, these specific hens might have better housing, feed, stimulating and secure environments, access to veterinary care, and above all, become de-commodified beings, but would remain shackled to the suffering of daily laying. This could only change if we managed to find a way to halt their hyper-ovulation.

We returned with our remaining chickens to the veterinarian to have them implanted with the Suprelorin contraception (Figure 2). Suprelorin contains the active ingredient deslorelin and is used in male dogs and ferrets to produce temporary, reversible infertility (European Medicines Agency 2012). In female dogs, Suprelorin stimulates oestrus and ovulation, and is used by the dog breeding industry on females who



Figure 2. Ruby getting a Suprelorin implant inserted into her back (© Yamini Narayanan).

have difficulty in ovulating and conceiving (Hedberg 2015). Mammalian metabolism is different to avian metabolism, and in hens Suprelorin suppresses ovulation.

Suprelorin comes as a pellet or a chip in a pre-loaded syringe with a thick needle (European Medicines Agency 2012). It is injected subcutaneously on the chickens' backs, between their wings, or on their breast, a process akin to microchipping. Over time, the implant slowly and continuously releases low doses of deslorelin (European Medicines Agency 2012), suppressing the reproductive hormonal enzymes in ovulating hens. Suprelorin comes in two sizes—4.7 mg and 9.4 mg, which can keep a chicken infertile for up to approximately six and twelve months respectively, depending on each hen's body biochemistry. The implant activates 24 to 48 hours later, and the hen ceases ovulating for a temporary period, until it wears off.

The politics of neutering animals has been of concern to feminist animal studies scholars. In the case of companion species like dogs, Srinivasan (2013, 113) challenges neutering, seen as the gold standard for dog welfare in the West, and argues that, as invasive biophysical interventions often enacted upon healthy individuals, they can and do present harm. So too the "neutering" of chickens is not uncomplicated, particularly after the first implantation. The hen goes through a heavy moult, and might withdraw from food somewhat, possibly due to nausea. The regrowth of new feathers is painful and uncomfortable. In the initial weeks after the first implant, the hen might need supplemental care such as tube-feeding. However, after a couple of months, the difference in their body condition is breathtaking, when nutrients and calories are not diverted into egg-making. The chickens add a third to their body weight. Their feathers glisten with health. The hens become noticeably calmer, at least partly due to the hormone suppression, making their previous state of anxiety and fretfulness all the more obvious. Their *infertility*—and good health—became a routinized dimension of our collective lives, a radical departure from the incessant fertility that constitutes being able-bodied—and productive—for females under patriarchal egg capitalism.

Patriarchal capitalization of female hyper-reproductivity and its "cures"

A politics of disability illuminates the structures and institutions that produce disability/ies (Wendell 1989). A politics of *ability* likewise reveals the logics and structures of patriarchal farmed animal capitalism. Ideas about animals' fertility and infertility, and the management of their reproductive capacities, are intertwined with ideas of what constitutes a good *human* life (Srinivasan 2013). The perception of *natural* nonhuman female fecundity is a ubiquitous way of promoting egg farming, when the "good life" composes egg consumption. Studies note the popular perception among the egg-consuming public, peddled by the egg industry, that "Happy chickens lay tastier [or more] eggs" (Bray and Ankeny 2017), despite the real possibility that a hen who is laying "more" might be decidedly *unhappy*. This patriarchal-capitalist gaslighting is not dissimilar to what would be an oppressive patriarchal circulation of the idea that "Happy women menstruate more!" Fertility is core to the way farmed animals (and people who menstruate) are valued in patriarchal, capitalist societies. The incapacity to reproduce or be fertile is a stigma enough to rationalize the dehumanization of women (Akarsu and Beji 2021). In the case of a hen, the "stigma" or "defect" of infertility is enough to be punished with her slaughter.

The bred ability in farmed females to hyper-reproduce perhaps exemplifies capitalism's "fetishization of productivism, which favours the development of productive forces as an absolute, positive value" (Trujillo 2021, 24). Ovulation is a biological precursor to all reproduction, making the ability to hyper-ovulate in female farmed animals a desired

characteristic under capitalism. Pigs are so severely overbred to hyper-ovulate to conceive high numbers of piglets that a single startled sow in factories containing tens of thousands of pregnant pigs will immediately lead to cascading miscarriages in all of them (Blanchette 2020). Embryo-transfer techniques in bovines bred for lactate (dairy) rely on magnifying the capacities of cows to hyper-ovulate so they may conceive six embryos, for instance, where they may normally produce only one (Narayanan 2018).

In the case of chickens bred for eggs, control over the hen's reproductive ability at the genomic level produces eggs of a standardized size, weight, and regularity across billions of ovulating bodies. The language of sustainability is used to promote green capitalism through ideas of animal *welfare*, rather than challenging animal consumption *per se* (Twine 2010), positioning the incessantly fertile female animal body as an infinite, renewable resource (Narayanan 2016). The resultant suffering of animals is "closely tied to the logics of capitalism itself ... the drive to produce and reproduce life" (Wadiwel 2018, 87). When reproduction becomes unfeasible as a result of bodily degeneration which is often rapid in the case of selectively bred animals, those "who are deemed 'non-productive' or 'productively disabled,'" are killed, regularizing and invisibilizing their introduced impairment (Somers and Soldatic 2020, 35–36).

Against this meta-landscape of planned, deliberate alterations to the animal body, how can we read the use of contraception to help some chickens? Is contraception a "cure" for hens' hyper-fertility? The idea of medical interventions as "cure" is fraught for CDS scholars. The medical-industrial complex, argues Eli Clare (2017), is invested in pathologizing and financializing biomedical "cures" to repair constructed/contested "defects," resulting in the eradication of impaired life itself. Clare writes (2017, 76), "The medical-industrial complex is unwavering in its commitment to cure's ultimate goal—ensuring that body-mind trouble no longer exists as if it had never existed in the first place." How can we think of the loss of introduced "trouble" in farmed animals, in a manner that neither disregards the outrage and grief over biomedical eradication in the human case, but also takes seriously the extractions and consequences of the intentional manipulation of animal reproduction?

The contraception may bring medical and biological benefit to a tiny number of hens placed to receive it, but it is neither a "cure" for their naturalized hyper-fertility, nor are these small pockets of infertile hen populations insignificant. The political value of chicken contraception may be to conceptualize an ecofeminist model of *naturalized ability* of farmed females to be hyper reproductive. It was only *after* our hens were on contraception that we could fully appreciate infertility as an integral part of female life. In tangibly (re)introducing infertility as an important state of being, and a fundamental right for the female body, chicken contraception allowed a glimpse into the rich possibilities of chicken life, when a part of their everyday was not spent in anxiety and pain from daily laying. This palpable contrast presented a radical alternative to being such an intensively bred animal that the *animal* herself became lost through generations of selective breeding.

The use of contraception as resistance to the anthropatriarchal control of female reproduction is not straightforward. Like the IUD, the Suprelorin enacts disciplinary power on the female body and can also turn it into a "powerful entity" (Takeshita 2012, 27). As a health technology, contraception is pivoted around "choice" in human politics. The question of *reproductive choice*, a complex "biopolitical script" even in the case of humans (Takeshita 2012, 28), becomes a moot one in the case of hens, who had no choice in the genomic manipulation of their reproduction for egg farming, or in their implantation. The human makes the "choice" in both the

commodification and de-commodification of their ovulation. However, contraception may enable them a measure of *reproductive freedom*, in attempting to recreate avian ovulation patterns of seasonal fertility and infertility as closely as possible.

Nonetheless, it is not too far a stretch to consider that chickens (and other farmed animals) make their “reproductive choice” known. Sultam’s swollen red, painful cloaca due to daily laying and her shouting around laying time; the high-pitched anxiety of laying hens; their depressed eating, hunched features, eyes tight shut during times of pain *are all telling us something*, necessitating an ethical accounting from humans (Donovan 2007) who are responsible for breeding such suffering.

These features and cries of pain can be read as chronic suffering and illness. Wendell (2001, 21) writes, “Many of us with chronic illnesses are not obviously disabled; to be recognized as disabled, we have to remind people frequently of our needs and limitations.” A politics of disability and ability, for humans or non, must also be able to accommodate the realities of pain and suffering, especially when deliberately inflicted on vulnerable or exploitable subjects. As Taylor (2017, 144) writes, the “denial of suffering is as problematic as an over-emphasis on suffering.” Pain politics takes seriously the realities of those suffering pain, advocates for appropriate, respectful medical interventions (Jones 2016), and in the case of farmed female pain, challenges the violent extractions of patriarchal capitalism.

The Suprelorin, like the IUD, is not merely a technological device that transforms a fertile body into a sterile one (Takeshita 2012); in chicken veterinary care, it becomes a life-saving device when female fertility is fashioned at the genomic level into a life-threatening condition. A “desire for cure is not necessarily anti-crip” (Taylor 2017, 141), and indeed, a desire for “cure” for inflicted female reproductive impairment might be core to anti-patriarchal and anti-capitalist resistance. Women’s infertility through contraception and the consequent erosion of their traditional roles is both a threat to religious and political conservatives and a pathway to their liberation (Takeshita 2012). So too hens’ infertility is cause for anthropatriarchal panic. The Suprelorin subjectifies and politicizes the hen in such radical ways that the avian veterinary sector already faces challenges from the state that restrict or prohibit treatments that may de-commodify and de-capitalize hens. In the United States, Australia, and New Zealand, Suprelorin can only be used “off-label” by veterinarians as it has not been approved for use in chickens. Expensive implantation may be restricted to middle/upper-class, educated rescuers, not necessarily available to working-class rescuers, or large sanctuaries who are less likely to be able to implant the hundreds of hens they might rescue. Like women’s contraception (Takeshita 2012), chicken contraception is already entangled with capitalism, anthropocentrism, patriarchy, and even religious and cultural worldviews of “what”—not who—a hen is.

Such political and ethical uneasiness is crucial, for it is a reminder that chicken contraception is *not* the “cure” to the extractions that constitute egg farming. Rather, as Clare (2017, 62) reminds us, “Cure also requires dismantling racism, poverty, and environmental injustice. I let health and cure take on multiple meanings.” Cure does not imply a return to the pristine—for despite trying to renew, repair, and relearn ways of the older time, “there is no return to the past” (Clare 2017, 60). “Cure” perhaps also involves sitting with the self-doubt that pervades the messy process of resistance and justice. Takeshita argues (2012, 168) “feminists must always feel conflicted ... Feeling ambivalent, I argue, is a state of feminist consciousness that is committed to a holistic vision.” Chickens, one may imagine, want to be free from both the anthropatriarchy of enforced selective breeding, *and* ecofeminist resistance through



Figure 3. Ex-battery hens Popper and Charlie discovering a world of freedom with amazement and wonder (© Yamini Narayanan).

contraception. In the women's movement, contraception was central in shifting the axis of power and control in the fraught history between feminists and the state over reproductive rights (Bracke 2017). So too, chicken contraception might allow humans to imagine the cessation of selective breeding of the *egg commodity*.

Ultimately, the fullest feminist resistance to the violence of patriarchal control of reproduction must include an intervention on behalf of farmed animals that asserts their own rights to reproduction, and intra-specific kinship. As Gruen writes (2011, 160), "The freedom to reproduce and to care for the young is central in the development of important affiliative social skills that are necessary to build meaningful bonds with conspecifics and to enhance group stability." Hens are devoted and fiercely protective mothers, a tragic irony considering their male chicks are gassed, drowned or burnt at birth by the egg industry, and the female infants never know their mothers at all (Davis 2019). A fuller feminist philosophy and praxis must be based, at the least, upon a commitment to vegan-feminist politics, and more sovereign, autonomous states of being and place for domesticated animals with the freedom to form their own kinship and social relationships through reproduction, parenting, and care (Figure 3).

Conclusions

Invoking an ecofeminist analysis of the commodification and capitalization of farmed female reproduction, specifically the phenomenon of hyper-ovulation bred in hens for

eggs, the paper proposes a socio-capitalist model of *ability* as also profuse with the potential for harm. Farmed animal capitalism, particularly for “feminized protein”, is based on the perceived naturalized ability of female animals to over-produce their ovum and lactate for human consumption. Through an analysis of *ability* politics in farmed animals as a complement to the *disability* politics in humans, it extends feminist CDS into ecofeminist CDS, a relatively neglected and yet important arena of CDS politics.

Animated and inspired by liberated hens from egg farms who lived, flourished, and died in our care, in our shared hen-human home, the paper frames their condition of hyper-ovulation as a deliberately introduced reproductive impairment to serve egg capitalism. In contrast to the naming and then management of impairment in the human case (Tremain 2006), reproductive impairment is *disappeared* in the case of hyper-ovulating hens.

The use of chicken contraception to enable the seasonal infertility that is part of avian life complicates the purported *ability* of hens to be continuously fertile. While also an exercise of power over animal bodies, the contraception *visibilizes* the introduced reproductive impairment, challenging the bred condition of hyper-fertility in “egg” hens as their biological *ability* to be hyper-fertile. The contraception may allow hens a measure of reproductive freedom, by recreating somewhat the ovulation cycle that they may have experienced prior to selective breeding. Contraception, however, is not the “solution” to the hyper-fertility of hens; rather, their selective breeding for eggs must cease, enabling sovereignty for chickens, perhaps as part of a rewilding process that is being investigated for many species.

The reintroduction of hen infertility through contraception calls for feminist resistance to the control of *all* female reproduction, including the violence to the farmed body for patriarchal capitalism. Feminists have conceptualized reproductive rights as human rights; calling for a reframing of human rights as “sentient rights,” political theorist Alasdair Cochrane (2013: 655) argues that “human rights are not qualitatively distinct from the basic entitlements of other sentient creatures.” A shared ecofeminist resistance and advocacy against the control, commodification, and capitalization of female reproduction can strengthen interspecies alliances that are necessary to undo the violence of anthropocentrism itself.

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Note

1 In discussing contraception for reproductively impaired/hyper-fertile hens, this paper distinguishes the coercive sterilization of women with disabilities (and other vulnerable minoritized or racialized groups), in the interests of eugenically driven health or public policy (Calero et al. 2021). The paper is not motivated by the eradication of disability, but the recognition of non-consensual reproductive and productive *ability* enforced upon farmed nonhuman females.

References

- Adams, Carol J. 2007, 1995. Caring about suffering: A feminist exploration. In J. Donovan and C. J. Adams (eds), *The feminist care tradition in animal ethics*. New York: Columbia University Press.
- Adams, Carol J. 2010. Why feminist-vegan now? *Feminism and Psychology* 20 (3): 302–17.
- Akarsu, Rukiye Höbek, and Kızılca Nezihe Beji. 2021. Spiritual and religious Issues of stigmatization of women with infertility: A qualitative study. *Journal of Religion and Health* 60: 256–67.
- Alabi, O. M. 2019. Influence of exogenous gonadal steroids on pubertal age of hens and internal qualities of eggs. *Zhivotnovadni Nauki* 57 (1): 36–43 (Bg).
- Bain, M. M., Y. Nys, and I. C. Dunn. 2016. Increasing persistency in lay and stabilising egg quality in longer laying cycles: What are the challenges? *British Poultry Science* 57 (3): 330–38.
- Berenstein, Nora. 2020. White feminist gaslighting. *Hypatia* 35: 733–58.
- Blanchette, Alex. 2020. *Porkopolis: American animality, standardized life, and the factory farm*. Durham, NC: Duke University Press.
- Bracke, M. Anne. 2017. Feminism, the state, and the centrality of reproduction: Abortion struggles in 1970s Italy. *Social History* 42 (4): 524–46.
- Bray, H. J., and Rachel Ankeny. 2017. Happy chickens lay tastier eggs: Motivations for buying free-range eggs in Australia. *Anthrozoös* 30 (2): 213–26.
- Calero, Serrato, M' de las Mercedes, Ángel M. Delgado-Vázquez, and Rosa M. Díaz Jiménez. 2021. Systematized review and meta-synthesis of the sterilization of women with disabilities in the field of social science: From macroeugenics to microeugenics. *Sexuality Research and Social Policy* 18 (3): 653–71.
- Clare, Eli. 2017. *Brilliant imperfection: Grappling with cure*. Durham, NC: Duke University Press.
- Clinical Veterinary Advisor. 2013. Chronic egg laying. *Clutch Size*. <https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/clutch-size>
- Cochrane, Alasdair. 2013. From human rights to sentient rights. *Critical Review of International Social and Political Philosophy* 16 (5): 655–75.
- Collias, N. E., and P. Saichuae. 1967. Ecology of the red jungle fowl in Thailand and Malaya with reference to the origin of domestication. *The Siam Society*. https://thesiamsociety.org/wp-content/uploads/2020/04/NHBSS_022_1-2n_Collias_EcologyOfTheRedJ.pdf
- Davis, Karen. 2019. *For the birds: From exploitation to liberation*. New York: Lantern.
- Donovan, Josephine. 2007. Attention to suffering: Sympathy as a basis for ethical treatment of animals. In *The feminist care tradition in animal ethics*, ed. Josephine Donovan and Carol J. Adams. New York: Columbia University Press.
- European Medicines Agency. 2012. Suprelorin. https://www.ema.europa.eu/en/documents/overview/suprelorin-epar-summary-public_en.pdf
- Gillespie, Kathryn. 2014. Sexualized violence and the gendered commodification of the animal body in Pacific Northwest US dairy production. *Gender, Place and Culture: A Journal of Feminist Geography* 21 (10): 1321–37.
- Gillespie, Kathryn. 2016. Witnessing animal others: Bearing witness, grief, and the political function of emotion. *Hypatia* 31 (3): 572–88.
- Gillespie, Kathryn. 2021. For multispecies autoethnography. *Environment and Planning E: Nature and Space* 1–14. <https://doi.org/10.1177/25148486211052872>
- Gruen, Lori. 2011. *Ethics and animals: An introduction*. Cambridge and New York: Cambridge University Press.
- Gupta, Kristina. 2020. *Medical entanglements: Rethinking feminist debates about healthcare*. New Brunswick, NJ: Rutgers University Press.
- Hansen, Reed S. 1976. Nervousness and hysteria of mature female chickens. *Poultry Science* 55 (2): 531–43.
- Haodon, G. 1945. Poultry keeping in Bengal. *New Zealand Journal of Agricultural Sciences* 71: 515, 517.
- Hedberg, Karen. 2015. Suprelorin: Both sides of the story. *Vet Chat*. <https://www.dogsnsww.org.au/media/2950/suprelorin-both-sides-of-the-story-june-2015.pdf>
- Hess, Laurie. 2021. Egg yolk peritonitis in backyard chickens. *VCA Hospitals*. <https://vcahospitals.com/know-your-pet/egg-yolk-peritonitis-in-backyard-chickens>
- Hoppes, Sharman M. 2015. Reproductive diseases of pet birds. *MSD Vet Manual May*. <https://www.msddvetmanual.com/exotic-and-laboratory-animals/pet-birds/reproductive-diseases-of-pet-birds>
- Iglesias, Franco, and Lucas Ruiz. 2013. *Birds: Evolution and behavior, breeding strategies, migration and spread of disease*. New York: Nova Science Publishers.

- Jacob, Jacquie. n.d. A. Avian reproductive system—female. *Small and Backyard Poultry*. <https://poultry.extension.org/articles/poultry-anatomy/avian-reproductive-female/>.
- Jacob, Jacquie. n.d. B. Feather pecking and cannibalism in small and backyard poultry flocks. *Small and Backyard Poultry*. <https://poultry.extension.org/articles/poultry-behavior/feather-pecking-and-cannibalism-in-small-and-backyard-poultry-flocks/>
- Johnson, Patricia A., and James R. Giles. 2013. The hen as a model of ovarian cancer. *Nature Reviews Cancer* 13: 432.
- Jones, Cara E. 2016. The pain of endo existence: Toward a feminist disability studies reading of endometriosis. *Hypatia* 31 (3): 554–71.
- King, Barbara J. 2018. Emotion. In *Critical terms for animal studies*, ed. Lori Gruen. Chicago: University of Chicago Press.
- Lawal, Akinyanju Raman *et al.* 2020. The wild species genome ancestry of domestic chickens. *BMC Biology* 18 (1): 1–18.
- Marino, Lori. 2017. Thinking chickens: A review of cognition, emotion, and behavior in the domestic chicken. *Animal Cognition* 20: 127–47.
- Mills, Catherine. 2016. Biopolitics and human reproduction. In *Routledge handbook of biopolitics*, ed. Sergei Prozorov and Simona Rentea. London: Taylor & Francis Group.
- Moiseyeva, I. G., M. N. Romanov, A. A. Nikiforov, A.A. Sevastyanova, and S. K. Semyenova. 2003. Evolutionary relationships of Red Jungle Fowl and chicken breeds. *Genetics Selection Evolution* 35 (4): 403–23.
- Morris, Jenny. 2001. Impairment and disability: Constructing an ethics of care that promotes human rights. *Hypatia* 16 (4): 1–16.
- Narayanan, Yamini. 2016. Where are the animals in sustainable development? The case for ethical stewardship in animal husbandry. *Sustainable Development* 26 (3): 172–80.
- Narayanan, Yamini. 2018. Cow protectionism and bovine frozen semen farms in India: Analysing cruelty, speciesism and climate change. *Society and Animals: Journal of Human-Animal Studies* 26 (1): 13–33.
- Narayanan, Yamini. 2019. “Cow is a mother, mothers can do anything for their children!” Gaushalas as landscapes of anthropatriarchy and Hindu patriarchy. *Hypatia* 34 (2): 195–221.
- Oliver, Catherine. 2021. Returning to “The Good Life”? Chickens and chicken-keeping during Covid-19 in Britain. *Animal Studies Journal* 10 (1): 114–39.
- Pitt, J., P. K. Gillingham, M. Maltby, and J. R. Stewart. 2016. New perspectives on the ecology of early domestic fowl: An interdisciplinary approach. *Journal of Archaeological Science* 74: 1–10.
- Rosenfeld, Heather. 2021. Witnessing Pandora: Doing “undone science” at chicken sanctuaries. *Catalyst: Feminism, Theory, Technoscience* 7 (2): 1–19.
- Silbergeld, Ellen K. 2016. *Chickenizing farms and food: How industrial meat production endangers workers, animals, and consumers*. Baltimore: Johns Hopkins University Press.
- Somers, Kelly, and Karen Soldatic. 2020. Productive bodies: How neoliberalism makes and unmakes disability in human and non-human animals. In *Disability and animality: Crip perspectives in critical animal studies*, ed. Stephanie Jenkins, Kelly Struthers Montford, and Chloë Taylor. Abingdon: Taylor & Francis Group.
- Srinivasan, Krithika. 2013. The biopolitics of animal being and welfare: Dog control and care in the UK and India. *Transactions of the Institute of British Geographers* 38: 106–19.
- Takeshita, Chikako. 2012. *The global biopolitics of the IUD: How science constructs contraceptive users and women’s bodies*. Cambridge, MA: MIT Press.
- Taylor, Sunaura. 2017. *Beasts of burden: Animal and disability liberation*. New York: New Press.
- Tixier-Boichard, Michèle. 2020. From the jungle fowl to highly performing chickens: Are we reaching limits? *World’s Poultry Science Journal* 76 (1): 2–17.
- Tremain, Shelley. 2006. Reproductive freedom, self-regulation, and the government of impairment in utero. *Hypatia* 21 (1): 35–53.
- Trujillo, Mina Lorena Navarro. 2021. Notes for a critical and ecological view of patriarchal capitalism in the web of life. *Capital and Class* 45 (1): 21–32.
- Twine, Richard. 2010. *Animals as biotechnology: Ethics, sustainability and critical animal studies*. London and Washington, DC: Earthscan.
- Wadiwel, Dinesh Joseph. 2018. Biopolitics. In *Critical terms for animal studies*, ed. L. Gruen. Chicago: University of Chicago Press.

- Walzem, R. L., and S. E. Chen. 2014. Obesity-induced dysfunctions in female reproduction: Lessons from birds and mammals. *Advances in Nutrition* 5 (2): 199–206.
- Wang, M., M. Thakur, M. Peng, *et al.* 2020. 863 genomes reveal the origin and domestication of chicken. *Cell Research* 30: 693–701.
- Weingarten, Karen. 2019. Philosophy's futures: The reproductive body's turn. *Hypatia* 34 (1): 161–66.
- Wendell, Susan. 1989. Toward a feminist theory of disability. *Hypatia* 4 (2): 104–24.
- Wendell, Susan. 2001. Unhealthy disabled: Treating chronic illnesses as disabilities. *Hypatia* 16 (4): 17–33.
- Wiegman, Robyn. 2010. The intimacy of critique: Ruminations on feminism as a living thing. *Feminist Theory* 11 (1): 79–84.

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