



FORUM

University of Edinburgh
Postgraduate Journal of Culture and the Arts
Issue 36 | 2025

Title	4-H and the Family Farm as Historical Materialist Connection Between Trans and Animal Struggles: A Response to Trans* New Materialism
Author	Valerie Sofie Tollhopf
Publication	FORUM: University of Edinburgh Postgraduate Journal of Culture & the Arts
Issue Number	36
Publication Date	October 2025

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4-H and the Family Farm as Historical Materialist Connection Between Trans and Animal Struggles: A Response to Trans* New Materialism

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Trans new materialism (TNM) is a relatively recent trend in trans studies which attempts to conjoin analyses of transness with insights from posthumanism and animal studies. As of yet, it represents the most substantial corpus of literature engaged with fostering connections between trans people and animals. TNM has, however, come under criticism from within trans studies. Andrea Long Chu provocatively called it “the worst possible direction for trans studies to go in” and authors like Kadji Amin and Josch Hoenes warn that TNM runs the risk of decentring actual lived experiences of trans people and neglecting the specific historical situatedness of power structures. Rather than dismissing TNM’s project of fostering trans-animal connections, I am interested in addressing the concerns of TNM’s critics by linking the struggles of trans people and animals in a historical materialist way. In this paper, I create such an analysis by drawing on Gabriel Rosenberg’s work on the US agricultural youth organisation 4-H and the heteronormative family farm. Extending the purview of Rosenberg’s account to include cisnormativity, this case study reveals that: firstly, the elimination of transness from the bodies of rural youth via 4-H and the family farm was inextricably tied to the capital-intensification of agriculture in the early twentieth century, which aggravated animal domination both qualitatively and quantitatively; and, secondly, the normalisation of children’s bodies according to a eugenic ideal of healthy, white, hetero, and cis bodies was informed by the biopolitical governance of animals and vice versa. Reproduction signified a vital link between the two.*

A topic which at first glance may be dismissed by some as a haphazardly, or even forcefully, constructed connection – the joint consideration of trans and animal struggles – upon closer examination constitutes an important terrain for theoretical inquiries into both gender and animality. Beyond the more apparent links between trans and animal issues in terms of social movement overlaps or fascist imaginaries revealing trans-animal connections, a relatively young strand of trans studies scholarship has brought analyses of transness in touch with posthumanism and animal studies. What can be subsumed under the label trans* new materialism (TNM) is chiefly characterised by the employment of transness as an

epistemic engine for cross-fertilisation with topics beyond the scope of trans people's lived experience, as well as the decentring of the human, a strong focus on relationality, entanglement, processes of becoming, and the agency of matter itself. Kadji Amin, a critic of the field, first came up with the term trans* new materialism. Despite the term not being very widely circulated, I use it here since it best grasps the theoretical corpus of literature I describe without there being an obvious pejorative connotation.¹ While not all texts in this field deal with animal experiences specifically, I nevertheless argue that TNM represents the most substantial body of literature to date dealing with trans-animal connections. As such, TNM has become the target of various critiques. Apart from the more blunt denunciations of the field, such as Andrea Long Chu's provocative declaration that it is "the worst possible direction for trans studies to go in" and Amin denouncing some of TNM's central tenets as a "devil's bargain" (Chu and Drager 111; "Whither Trans Studies" 56), several more in-depth engagements with TNM have been brought forward which arguably voice important concerns. Most central for the sake of this paper are Amin's and Josch Hoenes' contentions that TNM runs the risk of both neglecting the historicity of power structures and losing sight of trans people's lived experiences.

Instead of drawing the conclusion that TNM should be discarded altogether, in the following text, I address the concerns voiced contra TNM while simultaneously persisting with its political ambition to connect trans and animal struggles. The historical materialist approach that I propose foregrounds structural links between the violence faced by trans people and animals while paying specific attention to this violence's historical embeddedness in power relations. It thereby creates a foundation for exploring political alliances between trans- and animal-related social movements which share an anti-capitalist common ground, though more theoretical work will be needed in this regard. In tracing historical materialist trans-animal connections, I draw on Gabriel Rosenberg's analysis of the US-based agricultural youth organisation 4-H and its biopolitical investment in the governance of human and nonhuman bodies. I show that the 4-H eugenic gendering processes and the entrenchment of the heteronormative family farm can be conceptualised as a case study which illustrates

¹ In this article, I use 'trans' predominantly to refer to actual trans people. My use of 'trans*' and 'trans-' is limited to their employment as theoretical concepts in their respective debates, the addition of the asterisk or the hyphen facilitating the application of transness beyond the scope of gender.

connections between violence against animals and the eradication of transness. In doing so, this text also illuminates key dynamics of the family as an institution, highlighting how reproduction is secured through acts of exclusion and how the governance of nonhuman life both shapes and is shaped by the normative familial sphere.

Trans* New Materialism and its Critics

Among the texts which can be considered part of the trans* new materialist corpus, the 2015 *Transgender Studies Quarterly* special issue *Tranimalities* certainly plays a prominent role (see also Barad; Chen “Animals Without Genitals”; Hird). In the issue’s introduction, Eva Hayward and Jami Weinstein attempt to conjoin “two seemingly divergent analytics”, trans studies and animal studies (195). Their employment of “trans*”, with the added starfish-inspired asterisk, is central to their contemplations. Evading a fixed, simple definition, the authors highlight the term’s intricacies and contradictions. To a large extent, following Hayward and Weinstein’s understanding, trans* takes on a prefixial quality, referencing movement “across, into, [...] with, through, of, [and] in”, without *-gender* necessarily being the corresponding suffix (196). Constituting one of trans studies’ most heated disputes, this engagement with trans as a more abstract heuristic goes back to the much-discussed 2008 *Women’s Studies Quarterly* special issue titled *Trans-* where this approach to trans studies was most crucially established (195; Stryker et al.). According to Hayward and Weinstein, trans* at once “troubles ontologized states” and can be understood as ontological in itself “insofar as it is the movement that produces beingness” (197; 196). While the use of the concept trans* unquestionably signifies a gesture of abstraction, going beyond the analysis of trans lived experiences and beyond trans as a mere identity descriptor, the authors claim that the concept is “a localization that foregrounds specificity” (198). Two theoretical thrusts can thus be seen at work in the special issue: an endeavour to challenge “the boundaries between, and existence of, differentiated, essential kinds” and a simultaneous grounding of this project in specific trans-animal encounters (201). Lastly, Hayward and Weinstein introduce the neologism “tranimalities” by emphasising the shared relevance of trans* and animality in relation to gender:

Just as trans* intervenes in the normative operations of sexual difference and ontology, animal difference announces a radically singular Other marked by sexual differences. It is this coextensive interplay of trans* and animals that prompts us to think them through the figuration of tranimalities. [...] Coupled with the prepositional prefix trans-, tranimalities is a double orientation: animalities are specificities but remain thresholds of emergence. Tranimalities is murmuration, schooling, and swarming. The provisional particular is always already folding into an emergent ensemble. (200)

In “Trans* Plasticity and the Ontology of Race and Species”, materialist trans studies scholar Kadji Amin voices one of the most convincing critiques of trans* new materialism. Via a Foucauldian approach and by using twentieth-century glandular science and science fiction imaginaries as case studies, Amin showcases that, in some instances, the overly optimistic investment in trans*, or its gerund form *transing*, is misplaced. Calling into question trans* new materialism’s hopeful attitude toward movement across, through and within ontologies, or “differentiated, essential kinds” (Hayward and Weinstein 201), Amin’s chief hypothesis is that trans* and transing, literalised in the form of human-animal transplantations, have been historically complicit in producing the ontology of race and species in the first place. He argues that what he terms trans* plasticity “has been both speculatively and actually conscripted into the service of eugenics, human engineering, and the use of nonhuman organisms as raw matter for the renewal of the human” (Amin “Trans* Plasticity” 65). Amin therefore pleads that TNM should be urgently complemented with a historically situated analysis of the power structures in which trans* is implicated. “Transing, in and of itself, is not the answer”, he concludes (Amin “Trans* Plasticity” 66).

From a different angle, German trans studies scholar Josch Hoenes formulates a critique of TNM which uses Karen Barad’s “TransMaterialities”, another key text in TNM, as a polemical target. Locating one pitfall of TNM in its often poetic and experimental writing style, which could be said to similarly apply to Hayward and Weinstein’s article, Hoenes accuses Barad of what he terms “aesthetic escapism” (5; my trans.).² Although Hoenes recognises the queer potentials of poetic and speculative writing (25), he claims that this academic style runs the risk of, on the one hand, neglecting the cultural-social aspects of material, lived, gendered

² All translations of Hoenes are my own.

experiences and, on the other hand, of participating in an “individualisation of trans* people [and] the depoliticisation of gendered life” (5). Hoenes draws attention to the fact that a veritable transgender hype, a celebration of transgender’s subversive potential, accompanied by an ignorance towards the actual material lived realities of trans people has been a long-standing trend in cultural studies (3). Against the idea that (gender) transitions should be regarded as subversive phenomena *per se*, a notion he rejects with cautioning reference to “neoliberal flexibilisation and normalisation imperatives” (16), Hoenes advises that the specific lived realities of trans people should be at the root of trans studies theorising and that scholars of the field should pay close attention to the embeddedness of trans experiences in power structures (1).

It must be noted that, while these are harsh criticisms, both Amin and Hoenes abstain from dismissing TNM altogether. Both emphasise that the field holds potential in terms of destabilising the fixity of biology and upending human exceptionalism but that there are also immanent dangers which must be confronted rigorously (Amin “Trans* Plasticity” 65; Hoenes 23). Assessing the exact extent to which the critiques of TNM can be regarded as warranted is a complex task. This is because, firstly, the texts which may be subsumed under the label TNM, while similar in central regards, are heterogeneous pieces of writing and, second, the creative and experimental prose of TNM and its resulting slippery character can make it difficult at times to directly confront the field with challenges such as those brought forward above.

The allegation that TNM could lead to disregard for specific lived experiences as well as a possible depoliticisation of trans struggles, for instance, has previously been anticipated by posthumanist scholar Camille Nurka (210). While this does not refute the critique, it serves to show that immanent processes of reflection on these topics have taken place in the past. Likewise, some passages in TNM scholarship appear to soften Amin’s and Hoenes’ objections. In Hayward and Weinstein’s introduction to *Tranimalities*, the authors write that trans* as a process of mattering “is not merely an abstraction of trans* but describes the political conditions of trans*life”, subsequently referencing the specific struggles of trans people regarding the perpetual denial of their existence (197). Mel Y. Chen, in an interview with Hayward, demands that, in conjoining trans and animal studies, we think “most deeply about the historical and geopolitical contexts in which the animals of our studies truly reside”

("Tranimacies" 320). In the following passages, Hayward proposes to discuss the critique that is "often lodged at new materialism or other object-oriented ontologies... that they tend to deracinate matter", upon which Chen comes up with their concept of "going cosmic", foregrounding the urgency of engaging with the specificities of power structures ("Tranimacies" 321). Furthermore, in her short essay titled "Transxenoestrogenesis", Hayward discusses the entanglement of violence against horses with embodied experiences of trans women via the pharmaceutical drug Premarin – an approach which could be interpreted as centring both trans and animal lived experiences in a historically-situated way.³ Hayward describes transxenoestrogenesis as an "ethico-politically problematic form of species symbiosis" and states that "[t]ransgender is noninnocent", thereby showcasing a concern for the complex political implications of TNM's analyses (258).

While it would thus be too simple to discard TNM as a naïve attempt to connect trans and animal issues which wholly disregards historically situated power structures and renders invisible the material living conditions of both trans people and animals, the previously mentioned examples, which may serve to partially redeem TNM, are not enough to resolve those problems altogether. In fact, there are very few TNM texts which foreground trans-animal links in a historically situated way and dedicate substantial attention to power structures, including anti-capitalist analysis, while highlighting the specificities of material trans and animal lived experiences. It is for this reason that, in the following part of the paper, I conceptualise a new trans-animal link, one which stays true to the political commitments of TNM insofar as it both decentres the primacy of the human and highlights the entanglement of trans and animal issues and which, at the same time, addresses the critiques voiced contra TNM with an analysis rooted in political-economic, historically-situated inquiry, centring the specific and material lived experiences of both trans people and animals. In order to pursue this project, I take queer and agrarian historian Gabriel Rosenberg's seminal work on 4-H and the heteronormative family farm as a point of departure. After introducing key aspects of

³ Premarin (whose name is a short form of 'pregnant mare urine') used to be one of the main forms of access to estrogen for many trans women, apart from its more general use as hormone replacement therapy. The industrial extraction of estrogen from pregnant horses involves significant violence, such as confinement, coerced reproduction, and, eventually, slaughter.

Rosenberg's analysis, I expand on his case study to demonstrate how it can be mobilised to conceptualise historical materialist connections between trans and animal struggles.

4-H, the Family Farm and (Non)Human Biopolitical Governance

In his influential 2015 monograph, *The 4-H Harvest: Sexuality and the State in Rural America*, Gabriel Rosenberg traces the twentieth-century history of the agricultural youth organisation 4-H and emphatically highlights its role as a biopolitical instrument of state power employed by the US government to propel capitalist development in rural areas and to produce desirable bodies, both human and nonhuman. Founded in 1902 in the USA, 4-H offered voluntary club structures to rural youths between the ages of ten and twenty in which they could learn about agricultural production, finance, and home economics. Via camps, projects, and contests, the young members – more than seventy million since 4-H's inception, a statistic which testifies to the institution's extensive influence – were incorporated into a wider agricultural community, encouraging them to become commendable farmers (Rosenberg 2).

Importantly, Rosenberg foregrounds the close connections between 4-H and the state. Far from the misleading idea that "rural communities are the last bastions of an authentic American culture untainted by government bureaucracy" (Rosenberg 3), 4-H, in his argument, is inseparably tied to US federal politics. Initiated as a program administered by the United States Department of Agriculture, 4-H has nevertheless often portrayed itself as apolitical, rendering opaque its role in enforcing state interests through the bodies of children (Rosenberg 181). In fact, Rosenberg states that 4-H's fluid, ambiguous relationship with the state and its innocence that hinged on this blurry self-portrayal contributed greatly to the power the organisation wielded (15).

Analysing the role 4-H played in capitalist modernisation, Rosenberg explains that, at the turn of the twentieth century, the road agricultural development would take was undecided. There were substantial regional differences between agricultural practices in the Northern and Southern regions of the USA. While, after the American Civil War, farms in the South were structured around a "neo-plantation" system based on tenant farmers and sharecroppers and characterised by restrictive labour regimes, California bore the first traces of a form of

mechanised agriculture that would later be adopted throughout the USA. Hiring labourers from Central America, China, and the Philippines while simultaneously being reliant on expensive irrigation systems, California's agricultural sector could be described as "land-poor, labor-rich" (Rosenberg 5). This, according to Rosenberg, posed an incentive for Californian farmers to mechanise their production and for investors to view those agricultural systems as valuable assets. An "industrial ideal" emerged that "invoked 'efficient,' 'progressive,' 'businesslike,' and 'scientific' agriculture nearly interchangeably to describe [a] prescriptive model of agriculture that privileged capital- and technology-intensive modes of production" (Rosenberg 5).

Rosenberg asserts that 4-H played a crucial role in the subsequent push toward more widespread employment of industrialised, technology- and capital-intensive agriculture. In programs targeting 4-H club members, the organisation circulated technology-oriented farming methods and steered young boys in the direction of becoming agricultural businessmen capable of managing more capital-intensive farms. 4-H thereby helped to pave the way for the industrialisation of agriculture, stifling the initial opposition of poor farmers and the broader agrarian Left (Rosenberg 5).

It is here already that some of the gendering processes which lie at the core of 4-H are highlighted through the specific ways in which boys were marked out for becoming the heads of agribusinesses. Rosenberg elaborates:

4-H projects also worked as gendering instruments. They offered everyday practices for masculine self-making and idealized specimens of adult masculinity. Loans provided rural boys with the means to buy a pig or calf, and the imperative to repay the loan encouraged efficiency, discipline, and precise financial record keeping, all characteristics deemed essential to propertied manhood. But commercial loans also laid the groundwork for sustained personal relationships with the fine examples of manhood that boys could not find at home. Club work vitally expanded the social universe of rural boys and exposed those boys to the example and influence of bankers, businessmen, and bureaucrats. From these intimacies, 4-H's boosters dreamed, a generation of farmer-businessmen would grow. (56)

Girls, on the other hand, scarcely participated in 4-H's loan programs and were discouraged from taking up active roles in stewarding farm finances and agricultural production, dealing predominantly with household management instead (Rosenberg 98). These gendering processes became an increasingly palpable dynamic during the 1920s and were part of a broader eugenic strategy to produce healthy, white, heteronormative bodies. As Rosenberg strikingly explains, "a history of 4-H must also be a history of sexuality, gender, and the body: a story about the gendered production of desirable bodies through heteronormative family farms" (10), emphasising that the previously discussed political-economic aspect of 4-H cannot be detached from its gendered dimension. By making these connections, Rosenberg manages to conjoin "two seemingly different objects – the politics of gender and sexuality as well as the politics of food and agriculture", both informed by analyses of capitalism and the state (10).

Further discussing the normalising processes facilitated through 4-H, Rosenberg describes that the biopolitical aspiration to produce healthy, white, and gendered bodies was necessarily imbued with racist logics. This also resembled 4-H's structural buildup. A racial segregation of 4-H's extension service being in place in those states with comparatively high club enrolments of Black populations, African American farmers were systematically disadvantaged and neglected by 4-H. African American county agents, for example, earned significantly less money than their white counterparts, which, as Rosenberg argues, was due to a "racial ideology that cast African American farmers as genetically incapable of mastering the complexities of scientific farming" (8).

The heterosexual family farm which 4-H actively promoted was therefore also idealised as white. Increasingly dominant in the 1930s, the model of the family farm, made up of a providing capitalist male farmer and his nurturing wife, was strengthened in order to secure social and biological reproduction, guaranteeing a steady supply of a healthy population generated in the countryside (Rosenberg 119-121). Rosenberg explicates that the family farm as a remedy for the reproductive crisis of the 1930s thereby complemented the negative eugenic efforts of the state – among them sterilisation campaigns and incarceration – which were employed to bolster the ideal of white, healthy, middle-class, rural heterosexuality. The family farm supported what could be described as "positive eugenic[s]" in that it encouraged "the fittest of society to reproduce more prolifically" (Rosenberg 126). Importantly,

Rosenberg shows that the popularity of the heteronormative family farm, far from being a natural constellation, was produced by the nexus of 4-H, capital, and the state. Being fragile and faltering in nature, the family farm needed federal support in order to stabilise its dominant position (Rosenberg 14).

Lastly, one crucial aspect of Rosenberg's work consists in his investigation of the links between the governance of human and nonhuman bodies. He stresses that agricultural production cannot be conceptualised as separate from the gendered governance of humans and vice versa (Rosenberg 11). While it has previously become clear that, according to Rosenberg, the industrialisation of agriculture was tied to intense gendering processes and the entrenchment of the white, heteronormative family farm, his book equally clarifies that the production of desirable human bodies was informed by agricultural practices and knowledge surrounding nonhumans. There was, for instance, a striking similarity between contests which centred commendable "livestock" individuals on the one hand and "better baby" competitions at state and county fairs on the other hand (Rosenberg 63). When Rosenberg explains that "in rural America, we find the state assembled out of unexpected materials", among them "prized calves, symmetrical ears of corn" and "the gendered bodies of rural youth", he highlights that the joint regulation and normalisation of both human and nonhuman bodies, facilitated through the biopolitical apparatus 4-H, played a major role for US state building (14).

4-H and the Family Farm as Historical Materialist Trans-Animal Link

Bringing the case study of 4-H and the family farm into closer contact with the previous theoretical considerations undertaken in this paper, at first glance, it may seem as if Rosenberg's inquiry into twentieth-century agriculture-related politics has relatively little to say about animal lives and transness specifically. While it is true that, in *The 4-H Harvest*, Rosenberg does not mention trans people at all and discusses animals in a way that does not inherently call into question their commodification via the animal industry, I nevertheless argue that his book, especially when taking into account that which may be discovered in the crevices and interstices of Rosenberg's writing, serves to create a historical materialist link between trans and animal struggles.

What is necessary in order to uncover the relevance of Rosenberg's work for the struggles of trans people is to conceive of the biopolitical apparatus of 4-H as one which necessarily also produced cis bodies. Rosenberg uses the term heteronormativity only in reference to the regulation of sexuality and gendered behaviour. Taking into account the functioning of the heterosexual matrix, the "grid of cultural intelligibility through which bodies, genders, and desires are naturalized", it becomes evident that heteronormativity always builds on the idea of two fixed sexes, male and female, which inextricably correspond to only two genders, man and woman (Butler 194). It is thus impossible to imagine 4-H's biopolitics and the ideal of the heteronormative family farm as not being simultaneously invested in the production of cisness and the eradication of trans bodies. The 4-H health programs, for instance, involved scrutinising "the symmetry of 'sex characteristics' " of club members, among other bodily examinations (Rosenberg 104). Although 4-H's attitude toward trans people cannot be deduced satisfyingly from Rosenberg's research, it is warranted to speculate that a stark deviation in terms of expected genital appearance would not have been in accordance with the organisation's eugenic ideal of desirable bodies. Likewise, considering the threat that trans people pose to the reproductive mechanisms of the family (Gleeson and O'Rourke 26) and given 4-H's involvement in propelling rural biological reproduction via the family farm, it is hard to imagine that any incongruency with one's assigned gender at birth would have been tolerated within the institution's heavily gendered communities. While Rosenberg concedes that his work "makes no direct comment on the histories of sexual minorities [or trans people]" (14), because of their implicit cisnormativity, the politics surrounding 4-H and the family farm are directly relevant for the struggles of trans people.

Regarding the role of animals in Rosenberg's account of 4-H, in contrast to trans people, they do appear to a significant extent. The severity of their oppressive situation and the ways in which the capital-intensification of agriculture aggravated their struggles are, however, seldom clearly pronounced in Rosenberg's book. What remains unsaid, for instance, is the pivotal circumstance that rural industrialisation and the mechanisation of farms drastically exacerbated the ways in which animals were abused and killed in facilities of the animal industry. While the factory farm as we know it today emerged only later in the twentieth century, the above-noted modernisation of agriculture according to the industrial ideal nevertheless helped pave the way for a more market- and efficiency-oriented incorporation

of so-called 'farm animals' in production processes, compounding violence against animals both qualitatively and quantitatively.

Contemplated from this angle, the nexus of 4-H and the heteronormative family farm serves to construct a historically situated case study where the struggles of trans people and animals coincide in a way that is relevant for political-economic analyses of capitalism and the state. The cisnormative regulation of children's bodies was inextricably tied to animal domination in several ways. First, the gendering processes inherent in 4-H club culture served to facilitate the development of capitalist agriculture, thereby directly affecting the material living conditions of animals. Accordingly, the exclusion and eradication of rural transness played a major role in aggravating the magnitude of violence against animals exerted by the animal industry. Capitalist development, advanced by the state, signified the connecting element between both. Second, the regulation and normalisation of human bodies according to a healthy, white, hetero, and cis ideal was heavily informed by the governance of animal bodies in agricultural contexts. Via the family farm, animal reproduction was linked to that of humans. The animal body that was best suited for agricultural production thus corresponded to the human body that was capable of generating the rise of a healthy population. The standardisation and further capitalist co-optation of animal bodies correlated with the elimination of transness in rural children who posed a threat to the reproductive ambitions of the family farm.

Conclusion

As I have shown, an examination of 4-H and the heteronormative family farm can serve to construct a materialist, historically situated link between trans and animal struggles that pays great attention to power structures. The governance of the bodies of the rural youth through 4-H was not only complicit in the production of gendered and racialised human norms but also deeply entangled with the biopolitical management of nonhuman animals and the capitalist transformation of agriculture. This article thereby formulates a response to the ongoing heated dispute concerning the place of TNM in trans studies. While there is much about trans* new materialism which is valuable and inspiring, it is equally important to take its critics seriously and to reflect on the concerns which have been voiced. As my intervention

showcases, scholarly engagement with animals and the nonhuman more broadly does not have to be expelled from trans studies for the sake of resolving the tensions surrounding TNM. On the contrary, Rosenberg's *The 4-H Harvest* powerfully demonstrates that, in specific instances, the examination of sexuality and gender, including transness, requires analyses of animality and vice versa. Hence, this approach contributes a significant, and thus far underdeveloped, dimension to the TNM debate: the possibility of linking transness and animality through a shared history of eugenics and involvement in capitalist development. I show that trans-animal connections need not rely on new materialism and trans* abstraction alone – they can also be revealed through concrete institutions and historically specific power formations.

Additionally, the engagement with 4-H sheds light on several crucial dynamics of the family as a historically contingent institution. It foregrounds that the family, far from being a neutral or natural unit, depends on mechanisms of exclusion – of trans, queer, racialised, and disabled subjects – in order to stabilise its function as a reproductive apparatus within capitalist and eugenic regimes. This case study further complicates understandings of the family by showing how its normative contours are not only enforced through human socialisation and biopolitical selection but also shaped by the governance of nonhuman life. In the context of the family farm, the human and nonhuman become co-constitutive; animal reproduction and standardisation feed directly into the regulation of human bodies deemed fit for reproducing a healthy, white, cis-heteronormative population. Rather than existing as separate spheres, the familial and the agricultural appear deeply entangled through shared logics of optimisation and productivity.

Although Rosenberg's account of 4-H and the family farm does not specifically cater to the lived realities of trans people, his work is nevertheless of great significance for trans struggles as it provides insights into an underexplored rationale for anti-trans politics: the capital-intensification of plant and animal agriculture. Future inquiries can build on this analysis by tracing the overlooked histories of rural trans and gender-variant lives. Continuing the theorisation of historical materialist trans-animal links will not only deepen our understanding of commonalities and differences in the governance of human and nonhuman bodies, it may also help imagine new forms of alliance against capitalism, transantagonism, and hierarchical anthropocentrism.

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