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Culling optimism: Circulating neoliberal affects in entrepreneurial animal disease policy

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ABSTRACT

Using Berlant's concept of cruel optimism, this paper explores how animal disease eradication can represent an unimaginable fantasy, the pursuit of which is an obstacle to farmers' emotional and financial prosperity. The paper shows how atmospheres of optimism surrounding disease eradication are constructed and linked to policy mobilities. These apparent *trans*-national circulations of neoliberal logics of 'ownership' provide policy legitimacy at times of crisis, but also disguise the emotional experiences of neoliberal policy lives and serve political interests by marginalising alternatives to the allure of eradication. The paper bases these arguments within an analysis of the development of animal disease policy in England since 1997, and recent interviews and workshops exploring future policy options for disease control with farmers and other stakeholders. Following the development of bovine Tuberculosis policy, the paper shows how the transnational mobility of neoliberal policies promoting farmer ownership were used to legitimise farmer- owned culling companies to control infected wildlife. In describing how these policies unravelled through emotional burnout and disillusion amongst farmers, the paper describes the difficulties of detachment from a relation of cruel optimism, either marked by tragedy and trauma, or an incompleteness defined as 'attached detachment'. In conclusion, the paper calls for further attention to other rural and agricultural fantasies to shed further light on the inequities of neoliberal life and need for just transitions.

1. Introduction

This paper considers the extent to which commitments to animal disease eradication represent a form of 'cruel optimism' – what Berlant (2011) refers to as an attachment to unimaginable fantasy, the pursuit of which is an obstacle to one's flourishing. The eradication of animal disease is cruel by nature: animals suffer from disease, which may itself result in death, whilst others must be killed for the disease to be 'stamped out' (Woods, 2004). Where disease spreads through vectors, such as charismatic mega-fauna, the apparent cruelty continues, as culling creates public anguish (Grant, 2009; Cassidy, 2019). To eradicate disease, one must be cruel to animals to be kind. As Roe and Greenhough (2023) suggest: 'where the distant hope for a cure is set against the cruelty, immediate suffering, lasting harm and death imposed on […] animals'. For people too, the stamping out of disease can be cruel: emotional bonds between farmers and animals are terminated, whilst the bureaucracy and regulations associated with eradication impinges on their sense of farming identity, and their mental well-being (Convery et al., 2008). It is in this sense that disease eradication can represent 'cruel optimism': its pursuit can bring an affectual future of hope, free from the burden of regulation and death, but its very pursuit can be uncertain, costly, and serve to marginalise and act as an obstacle to alternative futures.

We explore this sense of cruel optimism and the possibilities of detachment from it in relation to its spatial and temporal characteristics, specifically how affectual futures circulate at global scales through transnational policy mobility – what Peck and Theodore (2014) refer to as 'fast policy'. These kinds of transnational policy mobilities raise the prospect of quick fixes to wicked problems and represent a key dimension of neoliberal statecraft. In animal disease management, 'fast policy' reflects the international circulation of a set of neoliberal logics from Australia and New Zealand to other countries, that guide the creation and implementation of animal disease policy (Maye et al., 2012; Dibden et al., 2011; Higgins & Dibden, 2011). Like other forms of neoliberalisation, these approaches rely on establishing 'affective conditions' and 'structures of feeling' that 'condition how particular

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neoliberalisms actualise in the midst of other things' (Anderson, 2015: 734). Neoliberal affects are commonly related to moods of fear and anxiety within precarious lives. Yet, they may also be multiple and contradictory rather than totalising and deterministic, with hope and optimism sitting alongside pessimism and cruelty. It is this global circulation of neoliberal affects, and their encounters with local contexts, that this paper argues is a key element to creating and sustaining cruel optimism.

These neoliberal affects and their role as a relation of cruel optimism are examined within recent changes to the management of the livestock disease bovine tuberculosis (bTB) in England. Briefly, bTB is a zoonotic disease in farmed cattle and the most significant endemic disease in England (Defra, 2020). Its management is complicated by the involvement of wildlife vectors – principally badgers (a culturally iconic and protected species) – and debates over the contribution badger culling makes to the eradication of bTB. Since 2013, the Department for Environment, Food and Rural Affairs (Defra) have allowed farmers to establish 'culling companies' to conduct badger culling, thereby passing 'ownership' of disease control policy and implementation to them. Taking culling companies as a leading exemplar of contemporary transnational neoliberal animal disease policy, the paper explores its impact to the lives of those responsible for implementing it, and the long-term durability of the transformations of subjectivity that it seeks to instigate. Specifically, we explore the affectual costs of entrepreneurial subjectivities inherent to transnational neoliberal disease policy where cruelty features throughout without being immediately apparent due to initial feelings of hope and optimism displayed by those responsible for delivering the policy – in this case, farmers. In describing how optimism unravels through emotional burnout and disillusion, we also show that – in this case – detachment from a relation of cruel optimism is difficult, either marked by tragedy and trauma, or an incompleteness we refer to as 'attached detachment'.

To do this, the paper draws on data collected from ongoing engagement with bTB policy in the United Kingdom and New Zealand over a 20-year period, involving interviews and archival analysis. In addition, we draw on recent interviews and workshops in England involving 82 farmers and 35 stakeholders to assess the impacts of policies designed to promote 'ownership' of bTB policy by the agricultural community (see supplementary materials for further details).

1.1. *Cruel Optimism and Neoliberal Affects of Animal Disease Policy*

In 1997, the Australian government announced the success of its attempt to eradicate bTB. The programme had begun in the 1970 s, gradually pushing the remnants of the disease northwards until cornered in the Northern Territories, where farm businesses and the disease succumbed to a final intense effort to stamp out the disease by testing and slaughtering cattle. In historicising the eradication, accounts stress the affectual dimensions: the hard work of field staff and their elation as eradication approached, balanced by the loss of farm businesses as the collateral damage of these efforts (Lehane, 1996; Glanville, 2023). As Australia was achieving bTB freedom, nearby New Zealand was beginning its journey to stamp out the disease in similar fashion (Livingstone et al., 2015). As the memory of what bTB could do to a farm business subsided, an affectual atmosphere was summoned to assist in the final stages of eradication. Videos and leaflets (Animal Health Board., 2012) sought to remind farmers of these effects, to sustain an affectual memory that prioritised caution, fear and precaution as a key tool in the eradicator's toolbox.

These brief accounts begin to reveal the affectual dimensions to disease eradication – how hope sits alongside fear and grief to maintain attachment to the dream of eradication. It is in this affectual balancing act, that eradication can also be seen to reflect Berlant's notion of 'cruel optimism': that something desirable is also an obstacle to one's flourishing (Berlant, 2011: 1). The attraction of Berlant's (2011) concept for geographers – as shown in Anderson et al's (2023) review – lies in its approach to understanding 'why and how worlds persist through their cruelties' (Anderson in Anderson, et al 2023. p.144). Rather than ideological, habitual or other means that provide the inertia that sustain relational attachments, Berlant suggests relations and the worlds they create are held together by 'alluring and regulatory fantasies'. These fantasies provide an optimistic promise of 'the good life', providing a sense of order that make life liveable. The allure of some fantasies can turn out to be positive and reliable. But for some, their optimism transitions to cruelty: where the relations that support these fantasies begin to breakdown and fade away, Berlant judges them to have become 'significantly problematic' (Berlant, 2011, p.24). Still, whilst rejecting and stepping away from fantasies can appear harmful, so does remaining with them.

It is in this sense that optimism becomes cruel, placing subjects in a liminal position in which the division between flourishing and harm dissolve, and in which subjects must find ways of living with conflicting desires. The ways in which these relations are sustained despite their cruelty have particular relevance to work involving animals, where death sits alongside sustaining life. Indeed, relations of cruel optimism have similarities to those seeking to understand practices of care (Puig de la Bellacasa, 2010), and how the trade-offs between different forms of care are rationalised within agriculture. Porcher (2011) refers to the duality of care and harm within agriculture as a form of 'shared suffering' or 'moral injury' (Janoff-Bulman, 1992) in which agricultural workers suffer from imposing harmful conditions to farmed animals (Doolan-Noble et al., 2023), but who also find it difficult either to change systemic forces due to their marginalised social status or abandon their commitment due to their economic precarity (Scott & Visser, 2022; Lever & Milbourne, 2015). Levina (2018) and Roe and Greenhough (2023) draw more directly on Berlant's idea of cruel optimism in relation to the promises of animal welfare regulations within animal testing laboratories. In these contexts, the completion of care-work by animal technicians is contradictory, affecting their own well-being and caring abilities (Roe & Greenhough, 2023: 61). For Greenhough and Roe (in Anderson et al, 2023), these contradictory practices of care are accommodated within what Berlant (2011) refers to as 'affective realism'. This provides the ability to hold in tension opposing actions: the search for a better life that is achieved through caring for, but ultimately killing, animals. Importantly, these strategies of managing cognitive dissonance provide a barrier to thinking about alternative ways of living and working. Thus, for Greenhough and Roe (in Anderson et al., 2023: 156), cruel optimism 'foreclose[s] other forms of attachment' limiting the 'imagination and the capacity to envision other kinds of good life'. For disease eradication, this may involve recognising the limits to disease eradication, its connections to the systemic dimensions of agriculture, and the path-dependent power of disease classification systems (Hinchliffe et al., 2016).

The emphasis within cruel optimism on attachment to an allure of promises focuses attention on affects, and the structures that produce and maintain them. This reflects a similar interest in studies of neoliberal policy. As Anderson (2015: 737) suggests, one thing that neoliberal policies have in common is an 'affective life' which seeks to reorder 'contemporary affective life', often characterised by a mood of helplessness and anxiety. Alternatively, studies focus on the specific ways in which neoliberal policies leverage specific 'capacities to affect and be affected' in order to (re)produce the 'archetypal neoliberal subject' (Anderson, 2015: 736). In farming contexts, the idea of what constitutes 'good farming' (Burton et al., 2021) can be seen as integral to attempts to create specific atmospheres of affect. Thus, recent agricultural reforms in the UK (Defra, 2018) seek to summon the neoliberal spirit of entrepreneurialism as a defining characteristic of the post-Brexit 'good farmer', calling for them to be 'world leading' as a result of their 'competitiveness' and 'efficiency', and their willingness to innovate by adopting new technologies. Similarly, studies of animal disease and biosecurity have sought to elucidate how policies create and reinforce forms of 'biosecurity citizenship' which seek to impose and remind

citizens of their duties to act in ways consistent with disease-freedom (Barker, 2010). Here, statistical infrastructures are used to render the fear of disease and the opportunity of disease freedom visible. These techniques define the neoliberal subject as rational and calculative. Through the power of numerical inscriptions (Rose & Miller, 1992) subjects effectively become an 'entrepreneur of the self'. What counts as good farming is constructed and communicated through a range of government and statistical architectures that make visible farmers' cultural capital to inspire behavioural change. Thus, neoliberal approaches to livestock disease use performance indicators of disease-freedom in livestock to inspire affectual relations of pride in being a good farmer, and fear of losing social status by acting in ways that would spread disease (Enticott et al., 2021).

The spirit of entrepreneurialism is found not just in self-management, but in relation to the state and its actions. In seeking to broaden analysis of affect from a focus on subjectification through discourse and semiotics, Anderson (2015: 738) argues for a need to pay attention to 'collective affects…through which economic-political formations come to form and are lived'. Drawing on Foucault, Anderson points to 'state phobia' as a 'background condition' that shapes how neoliberalism positions the state in relation to the market, requiring re-evaluation and re-analysis of the form of government. In this sense, the crisis of the state is linked to the promise of a liberating entrepreneurial spirt to be found in individuals who can lead new political formulations. In neoliberal animal disease policy, this is captured through the liberating logics of 'ownership' and 'cost and responsibility sharing' that promise to transform stakeholders' lives, leaving them free to pursue their own visions free from government regulation. These neoliberal logics seek to transform the identities of actors within the policy process, assigning them new subjectivities, characteristics and roles. Thus, neoliberal animal disease policy redefines farmers as policy 'partners' and/or 'beneficiaries', legitimising their new financial responsibilities to the costs of policy (Bryant et al., 2022).

Underlying these logics are what policy studies have referred to in the past as 'policy entrepreneurs' who seek to redefine policy possibilities. Policy entrepreneurs – or what Kingdon (2003) refers to as 'problem entrepreneurs' – seek to create an atmosphere of urgency around problems making them worthy of attention (Spector & Kitsuse, 2001: 75). This literature highlights the importance of the creation of contexts that allow policy solutions and problems to be coupled (Kingdon, 2003), by taking advantage of events and opportunities that bring forth fears and moral panics (Mintrom, 1997; Schneider et al., 1995). In this sense, policy entrepreneurs demonstrate a range of skills (Mintrom & Norman, 2009): they possess social acuity to spot and take advantage of windows of opportunity using material and rhetorical resources to inspire a need to act.

These forms of entrepreneurial neoliberalism are not simply a local response to local problems. They have been mobilised and circulated as part of the global spread of neoliberal logics. Returning to the examples of disease eradication in Australia and New Zealand, not only is the spirit of entrepreneurialism a significant element of their approach to disease management, but these affects and associated policies and modes of governing have circulated to other parts of the world and policies. Specifically, in Australia and New Zealand, efforts to eradicate the disease are closely related to a neoliberal repertoire of 'cost and responsibility sharing' and 'ownership'. In Australia, bTB eradication was achieved through a partnership between the agricultural industry and governments in which farmers paid a levy to fund eradication. This approach was so successful that this partnership form of governing animal disease was maintained and covers Australia as a whole (More et al., 2015) and continues to be a guiding logic in animal disease management (Bryant et al., 2022). A similar logic was taken in New Zealand in which 'ownership' of the disease by farmers is credited with turning a failing policy into a successful eradication campaign (Sinclair et al., 2023). This approach developed at the same time as broader neoliberal restructuring of the New Zealand social policy and agriculture, under the Labour government's policy of 'Rogernomics' (Roche et al., 1992). Following the removal of agricultural subsidies, public funding for livestock disease controls also fell, leading to rising cases of bTB. In response, agricultural and veterinary stakeholders stepped into this institutional void, driving the establishment of the 1992 Biosecurity Act that allowed the creation and private funding of National Pest Management Agencies. The first of these to be incorporated was the Animal Health Board (AHB), established specifically to fund the eradication of bTB. The Act allowed the AHB to classify farmers as policy beneficiaries and therefore liable for the majority of disease control expenditure, whilst the government paid for the remaining public liabilities and benefits (related to biodiversity). In paying for disease control, the Act also permitted farmers a say in its governance, sitting on the board of the AHB and all farmers able to vote on specific policy decisions (such as the use of financial compensation).

Other neoliberal logics and strategies accompanied these changes. In 1997, the New Zealand Government privatised disease testing services, before providing the opportunity for disease control companies to compete for three-year tenders for disease surveillance. New farmer subjectivities emphasising 'biosecurity citizenship' (Barker, 2010) were created to visualise disease risks and 'good farming' identities (Burton et al., 2021). This included the creation of a classification of all farms to explain historic disease risks to potential cattle purchasers. Importantly, stakeholders – in this case farmers and auctioneers – also acted as policy entrepreneurs, creating and designing a system locally before its use at a national level (Enticott et al., 2021).

The global mobility of these forms of disease control policy raises concerns about the global homogeneity of policy, or in this case: the consistency of neoliberal affects in different places. In other words, if eradication policies rely on establishing affectual atmospheres to encourage and support ownership through entrepreneurialism, are their socio-spatial limits to their success? To what extent can policies and their structures of feeling and atmospheres travel to and endure in new contexts? Do entrepreneurial approaches to disease management developed in countries reliant on agricultural exports and a resourceful cultural 'can do' spirit (Haggerty et al., 2009) survive a move to countries with a different agricultural political economy? In response to these concerns, Peck and Theodore (2010) suggest that the success of policy mobility cannot be judged in binary terms. Rather, they suggest a more nuanced picture in which, after travelling around the world, idealised policy logics such as those in animal disease eradication "can take on lives of their own". In the study of these "policy lives", attention is therefore directed to the way policy models encounter, evolve and adapt to local contexts, leaving them bearing little resemblance to their original form (Larner, 2003).

At the same time, it is important to pay attention to the lives of those that occupy the new subjectivities within these neoliberal logics: those who come to assume and enact 'ownership' in their daily lives. This is important because the affectual energy required to become entrepreneurial has mental and physical limits and may act as the basis for detachment from neoliberal dreams. Far from providing an intense atmosphere of optimism, the promise of neoliberal reason may be characterised by fantasy and false hope in which attachment is maladaptive (Purol & Chopik, 2020) and disillusion and boredom become modes of detachment (Anderson et al, 2019). These forms of detachment are evident in the literature on entrepreneurialism, which shows that the very activities that make entrepreneurs successful, are also those that may contribute to poor mental health or what is referred to as 'entrepreneurial burnout' (Palmer et al., 2021). Here, burnout, as a form of detachment, refers to the physical, emotional and mental exhaustion caused by long-term emotional demands (Tahar et al., 2022). The very characteristics of entrepreneurialism are identified as causes of burnout: the need to discover and create new opportunities, work quickly and for long hours without breaks, and working in uncertain situations which can create fears about the long-term personal future (Omrane et al., 2018). Research on entrepreneurial burnout in rural settings is relatively

rare, with most recent research focussing on the associations between work and general mental health conditions or subjective well-being, and its association with various stressors (Kallioniemi et al., 2016; Thuneberg & Mustonen, 2015). These include specific dimensions of entrepreneurialism, such as the search for finance and labour, and the development of entrepreneurial skills to navigate bureaucratic procedures to maintain economic prosperity (Frost & Laing, 2015). Similarly, in relation to the management of natural disasters such as wildfire and earthquakes, various studies have sought to examine the extent to which burnout contributes to volunteers leaving the workforce (Merlo et al., 2021; Whittaker et al., 2015). Elsewhere, other studies have looked at compassion fatigue as a reason for leaving volunteer or paid labour (Jacobs & Reese, 2021). Whilst burnout may be associated with particularly traumatic events, other research has shown how social bonding activities during and after these events can contribute to what is referred to as 'disaster social capital' (Bailey et al., 2006) that helps volunteers and workers to cope with and develop resilience to these pressures. Understanding these "policy lives" – the lived experiences of the neoliberal affectual logics of entrepreneurialism as they circulate around the world – can therefore help an exploration of eradication's cruel optimism.

2. Circulating Atmospheres of Optimism

The previous section questions the extent to which the global circulation of logics of entrepreneurial disease control contribute to a sense of cruel optimism: the dream of eradication quelled by the weight of entrepreneurial effort; whether it is possible to live with these affectual conflicts using strategies of affectual realism; the modes through which detachment occurs from dreams of eradication; and the consequences of doing so for alternative policy lives. Attempts to eradicate bovine Tuberculosis in England provide an ideal environment to explore these questions. Although a zoonotic disease, its public health consequences have largely been resolved using meat inspection and milk pasteurisation. However, in farmed cattle, the disease is the most significant animal health problem in the United Kingdom: national herd incidence rate in 2023 in England is 7.1 % and controls to prevent the spread of disease result in the annual culling of 38,000 cattle costing over £100 m (Defra, 2023b). Traditionally disease management followed a paternalistic model in which the State was responsible for all aspects of disease control (Enticott et al., 2011). Whilst conversations about partnership and ownership had been present prior to 2010, the election that year of a new Conservative-led coalition government, focussed on individual responsibility and fiscal austerity, accelerated their use within the management of bTB. Moreover, the eradication strategies published soon after (Defra, 2011) drew explicit inspiration from global learning, particularly the New Zealand approach. Subsequent iterations of the eradication strategy re-emphasised the commitment to the 'New Zealand approach' making 40 references to the country. The Secretary of State promised to learn from these experiences, make 'smart adaptions' so they worked locally, and emphasised the need for a change of governance:

> "The New Zealand government has commissioned an independent, farmer-led body, jointly funded by industry and government with responsibility for oversight and implementation of the eradication strategy. It has been a great success. I am absolutely clear that if we are to tackle this disease successfully, we need a different way of working together in England, which acknowledges the respective responsibilities for government and industry both in terms of what we do and how we pay for it" (Defra, 2014: 9)

The attraction of New Zealand, however, also stemmed from a shared hazard. In both countries, the spread of bTB was connected to a wildlife vector: badgers in England and possums in NZ. The attraction, however, was mutual: the discovery of these vectors had occurred in both countries simultaneously and had scientists from both countries examining each other's approaches. Fact finding missions from NZ to UK followed those from the UK to NZ culminating in a series of scientific conferences from the 1990 s onwards. The interest of scientists was in the efficiency of culling, but the evolution of neoliberal life in NZ had also led to changes in the organisation of culling. To keep farmers engaged with the eradication programme, the AHB developed a policy of Locally Initiated Programmes (LIPs) to empower farmers to take ownership of vector control and organise local culling operations themselves where the AHB was unable to fund possum culling itself. Accordingly, the English strategy placed great emphasis on 'partnership' and 'cost-sharing' between the government and farming industries, claiming that 'no other country' had eradicated bTB without following this approach. These logics have become accepted in subsequent strategy evaluations as the key to eradicate the disease in England (Godfray et al., 2018).

At first glance, the culling company policy adopted by Defra appears to provide a classic example of transnational 'fast policy', emulating NZs logic of ownership and policies like LIPs. In reality, its policy life is more complex reflecting local contexts and the political work of policy mobility. The eradication strategy was crucial to structuring an atmosphere of optimism surrounding the management of bTB. Its success, however, must be understood in relation to the affectual atmosphere of previous policy regimes that farmers perceived themselves to have been excluded and failed. The affectual atmosphere surrounding paternalistic disease styles of disease governance had been defined by an air of fatalism in which farmers believed an outbreak of bTB was just a matter of luck (Enticott, 2008). Contributing to this atmosphere was the unexpected result of a scientific trial between 1997–2007 that had sought to establish the contribution of badger culling to the incidence of bTB (Independent Scientific Group (ISG). 2007). Finding that culling badgers made no meaningful difference to bTB in cattle, and that farmers would make the situation worse if they were to cull badgers themselves, farmers complained that the science was flawed and mired in bureaucracy. In this toxic atmosphere of government and scientific distrust, some farmers took matters into their own hands, illegally culling what they believed to be 'sick' or 'dirty' badgers based on their own 'lay epidemiologies' and 'countryman' knowledges (Enticott, 2011; Maye et al., 2014; Goodall, 2021).

Farmers had also been frustrated by attempts to legally cull badgers. Throughout the scientific trial, a moratorium was in place to prevent anyone from applying for a badger removal licence under the 1992 Protection of Badgers Act. When this was lifted following the trial and emboldened by a review of the trial's scientific conclusions by the government's Chief Scientific Advisor (King, 2007), a group of farmers and vets applied for a badger culling licence. The group called themselves the VLA-9 after the genetic strain of bTB found predominantly in south-west England and received support from the National Farmers' Union. The group designed the culling licence according to the scientific advice contained in the CSA's report, using hard boundaries such as roads and rivers to limit the negative impacts of culling. At the same time, they collected signatures of support from local owners to prove that they would be able to access sufficient land to cull enough badgers, and explained how the cull would be funded by farmers. The licence was rejected, but the group acted as a pre-cursor to the approach later based on the New Zealand model in the eradication strategy.

This context speaks to the political work of claims of policy mobility. As Peck and Theodore (2014: 17) suggest, policy crises like bTB can provide ideal terrain for new controversial policies to successfully land. In this context, the apparent mobility of New Zealand policy served the purpose of creating an atmosphere of optimism around the prospect of eradication. It was not that New Zealand provided anything particularly new: farmers had already shown enthusiasm for culling licences, whilst across disease control policy as a whole, logics of cost sharing were gaining traction amongst policy makers, albeit resisted by farmers (Radcliffe, 2010). Undoubtedly, culling overcame this hurdle, providing a culturally compatible approach to disease control that farmers were prepared to pay for. But more importantly, the repeated references to

New Zealand's success and the desire to be seen to be learning from it, were vital ingredients in creating and channelling this atmosphere of optimism. The references to New Zealand therefore served politicians by displacing their responsibility to create new effective policy (Peck & Theodore, 2014), and justifying the choices to the public and farmers as successful. At the same time, claims that Defra were learning from New Zealand also served to provide 'a deceptive clarity about some evidently and easily superior solution, to mobilise support, and to disguise the creative alterations that the supposed 'imitation' is likely to involve' (Offe, 1996: 213). As we show below, one of the deceptions of the mobility of New Zealand's logic of ownership was the extent to which it hid the costs of the emotional labour within its atmosphere of optimism.

From 2013, farmers began to create culling companies such that by 2023, culling was operating in 72 different areas culling over 200,000 badgers (Defra, 2023a). With the help of the National Farmers' Union, their rapid creation and spread across the country can be seen to reflect a new-found sense of optimism and hope amongst farming communities that something could finally be done about bTB. The legal framework represented Defra's contribution to creating an atmosphere of optimism, but delivery would be the responsibility of the directors of cull companies whose skills in persuading farmers in cull areas to sign up would define its success. For some, this required little work: farmers were optimistic that culling companies would provide a 'future worth thinking about'. Thus, farmers and cull directors reported that they 'jumped at the chance' to set up a cull group, and described a sense that together farmers could get 'on top of the disease'. This affectual entrepreneurial spirit was captured in a range of common factors. The weight of the disease, both in economic and social terms, and the perceived contribution of badgers to it provided a clear motivation in leading and participating in the culling companies. Involvement in badger culling gave those farmers leading the companies a single focus, whilst those participating gained a sense of control that they could do something about the disease itself:

> "And my thought process is, "Let's get it sorted. Let's get TB sorted, but not in 25 years. Let's get it done in three to five years, that's what I am aiming for. And I am still in the cattle job when we get to this new horizon, this new future of TB free UK." (Farmer interview, high-risk bTB area)

In galvanising farmers to take action, the companies provided not just a local commitment but also a sense of community around disease control. In describing the success of the groups, leadership within the agricultural community was cited as a key factor. Leadership was also identified at different geographical scales: local farmers were involved in leading local culling groups, whilst at a national level the NFU provided political leadership, helping local groups when required. Specific farmers were identified as leaders and '*true farmers*' because they were prepared to *'put their heads above the parapet'*, take on responsibilities and take risks to eradicate bTB. They were also seen as leaders in that they understood not just the disease and its management, but the challenge of enrolling other farms into the scheme. This could involve culling companies deploying their own affectual logics, such as reliance on emotional cues of good farming and community togetherness. Alternatively, it could rely on demonstrating cultural competence of 'knowing farm work' – a reflection of what Mintrom and Norman (2009) refer to as 'social acuity'. In this sense, farming cultural competencies could be demonstrated in the kinds of negotiations that took place when signing up farmers to participate in the cull. This could involve knowing how to talk to farmers, through to knowing how to convince them that the cull was worth their while. In one instance, a cull director described gambling with a farmer who was reluctant to sign up to the cull. Suggesting that he was losing more money by not participating as a result of losing body condition in his cows from repeated bTB testing, the cull directors bet him otherwise and set up an experiment to weigh his cattle before and after a bTB test. The cull directors won the bet and the farmer signed up:

> "This was a chap who didn't want to spend about £17,000 on joining the cull, so he was trying to find everything not to do it. So we said, "Would you weigh them?" So he took a sample out of so much of the cattle, weighed and tested them properly, because we said we'd pay for the test if we got it wrong, for his time taken weighing them. So he did that and after he weighed them he was astounded by his weighing loss, so he joined up, paid the money, and we didn't have to pay him for testing his cows." (Farmer interview, high-risk bTB area)

This instance is also indicative of the informal and anti-bureaucratic style of working that underlined the entrepreneurialism of culling companies. Thus, the way in which culling was conducted also matched what can be described as a cultural model of work. This was evident in the way in which farmers dismissed bureaucratic ways of badger culling, such as those associated with the scientific trials, as inefficient.

> "The old wildlife units MAFF/Defra – they were decent at their job [but] they were still civil servants and they weren't as motivated as the farmer groups. So they get the job done, but in a fashion…having seen the industry delivered culling, the industry delivered culling was far more efficient, far more effective. Because they were more motivated." (Stakeholder interview)

By contrast, their approach, developed through their own knowledge of the local areas to be culled, but also in relation to 'practical ways of working' meant that the cull could be delivered more quickly and cheaply. Thus, cull directors described the need to work 'tightly' to minimize costs and 'get the job done' efficiently. Another way in which these cultural work practices were evident was in the way those involved in the cull responded to pressure from protestors. Frequently, key individuals came to be relied on whose expertise at trapping badgers was essential to the work required. This local expertise could be used to avoid protestors, but not always. Nevertheless, hard work was required when protestors disrupted the cull. 'Hard work' is frequently lauded as key part of 'good farming' identities (Burton et al., 2021). In this instance, a culture of hard work is indicated by 'getting on with the job' and 'taking the punishment' from protestors. For example:

> "[I]t just comes down to key men…when we've got one or two chaps like you [points at participant who is a badger trapper] who were very proficient and we're out in a quiet area, where the 'antis' didn't know about them, there was a patch of our cull zone that was not announced, and you wouldn't believe how well they trapped in that patch! But the main patch, they just piled in on us. And we sort of shut up, got on with it, and took the punishment." (Farmer workshop, high-risk bTB area)

3. Cruel Optimism

If 'taking punishment' was part of the affectual work of ensuring culling companies worked, it also reveals it's cruel optimism: how attachment was causing harm to those involved. One challenge was to maintain the atmosphere of optimism released when culling began. The lived experience of these entrepreneurial affects was such that the atmosphere of optimism began to deflate soon after it was created. In interviews and workshops participants described how cull directors and farmers involved in culling were emotionally and physically tired of the work involved. For some, these activities had taken over their lives affecting their work and family lives. Signing up farmers in each cull area, collecting payments and culling badgers all involved significant physical and emotional costs. Cull directors reported suffering sleepless nights as a consequence of the work, whilst others described how "*everybody was tired because we exhausted everyone in the cull group…the amount of time, effort and money involved in doing it*" (Farmer workshop, high-risk bTB area). In this way, participants described how these affects were simultaneously a factor in limiting the long-term viability of culling companies. These forms of physical and emotional exhaustion were

experienced by volunteers within cull companies who dropped out of helping with the cull because of other time commitments. Cull directors also felt social pressure in the form of anti-cull protestors seeking to disrupt not just culling activities, but the lives of those involved in culling. Managing conflict and trying to devise plans to avoid encountering protestors contributed to stress and exhaustion amongst those involved in culling. Being 'hassled' by protestors and experiences of intimidation also contributed to volunteers 'losing interest' in helping with the work of disease eradication. Contributing to this mental exhaustion was a sense that culling companies were acting legally and contributing to the maintenance of a public good (i.e. food production) but whose efforts were minimised and disregarded by others, often acting outside the law:

> "We go about our legal duty, we get the accosted at abattoirs, people hate us for culling but we're doing a legal job, we're feeding people and yet we have to go through all this abuse and stress. We're feeding people!" (Farmer workshop, low-risk bTB area)

At the same time, the completion of culling licence was seen as an achievement, but also an endpoint to an entrepreneurial journey with a clear end point. As one farmer remarked: *"this was a once in a lifetime thing that's been done"* (Farmer interview, high-risk bTB area). This required a kind of 'affectual recovery' as a means of getting over the consequences of the 'hard slog' of getting people to participate in culling. Burnout was also experienced by volunteers within cull companies. Volunteers dropped out of helping with the cull because of other time commitments.

The lived experience of entrepreneurial atmospheres of farmer-led culling companies suggested that their long-term sustainability would at the very least require some rejuvenation because of the turnover of labour. However, a second key factor in the survival of the affectual atmosphere of culling companies is the politics that surround them. In Australia and New Zealand, these neoliberal affects were secured through institutional reforms that removed government from the day-to-day business of disease control. This had not happened in England and the prospect of government interference remained: in 2020 the government announced that badger culling would cease, and no new licences would be provided. Additionally, the government announced that vaccination of badgers would replace culling, and that a cattle vaccine would soon be available. Given the success of the cost-sharing arrangements in culling, proposals suggested that the delivery of these new interventions would follow a similar form to the badger culling companies, raising the prospect of 'culling companies' becoming 'vaccine companies'. The effect was to deflate the atmosphere of optimism, questioning the viability of these new policies. As one farmer remarked about the prospect of vaccine companies: "they are something of a nightmare scenario!".

Primarily, though, it was the politics of disease control that affected participants desire to be entrepreneurial. The handling of the announcement that culling companies would end, and its evidential basis, was questioned by farmers who, despite the challenges in organising badger culls, believed the approach to be working. Farmers claimed that the decision had been undertaken unfairly, alleging that the Prime Minister's wife – who had previously stated her opposition to the badger cull on animal welfare grounds – had unjustly 'interfered' in the political process (Doward, 2020). These political events contributed to a lack of trust in government and reluctance to engage in further policy delivery. Farmers believed they had returned to where they had started: with little hope for the future and tied into relations of distrust with the government:

> "[Vaccine companies] are an utter and complete waste of time and are never going to work. The culling companies were based around a pathological desire to actually do something. [Farmers] feel badly bruised. It'll never happen again. End of. They are so badly bruised, the people that did it, people that didn't want to do it, and now to have it taken away when there's data that says it works, it'll never happen again…and it's come to an end for the wrong reasons, when it was actually starting to work, and it's been replaced by something that is fairyland and the farmers will never forgive and never forget". (Farmer interview, high-risk bTB area)

4. Attached Detachments

The implication of Berlant's cruel optimism is that despite these lived experiences of the dream of eradication, farmers would continue to maintain attachment to the concept of disease eradication. Indeed, in discussing the limitations of vaccine or culling companies, farmers did not suggest that the pursuit of eradication was not worthwhile: despite the setbacks, the hope of eradication was still alluring and key to their flourishing as successful farmers. Good farmers are not those with diseased herds. As cruel optimism implies, farmers therefore remained locked into the pursuit of disease eradication to their own cost: they did not question the very logic of the need to eradicate a disease through regulatory mechanisms by arguing that it should be treated simply as another production disease that the farming industry should be left to manage by itself without the need for government regulation, not least because of the low risk to human health (Advisory Committee on the Microbiological Safety of Food, 2011).

Farmers' continued attachment to the idea of eradication reflect what Anderson and McLachlan (2012) refer to as a feat of 'endurance', sustained through the hope of innovation and adaption to disease outbreaks. At the same time, the rhythm of disease control provides periods of loss but also 'recovery' from the moral injury of losing cattle at the wrong time of their life (Noller et al, 2022). Attachment also reflects the continued power of disease freedom as articulated through economic relations and international institutions that set out trading relations and how these infrastructural systems continue to hold power. In this sense, cruel optimism is not simply a result of 'fading infrastructures' failing to provide the conditions for flourishing. Rather, it is the interaction between the uncertain machinery of national governments, set against unbending international regulations that constrain the very possibility of trying to think about new or alternative solutions (cf. Higgins & Dibden, 2011). Sustaining the allure of eradication are other dreams too: most notably the need to secure the intergenerational future of the family farm. Here, it is not so much fading infrastructures that problematicise continued attachment to these dreams, but the way neoliberal food systems concentrate power in ways that take advantage of farmers emotional connections to their land and identities, driving them to work harder until some can take no more:

> "Nobody knows what it's like, creating this almost like badge of honour that you're grafting harder than anybody else and that you [think] 'he'd gone on bloody holiday, what kind of farmer's that?'. But I think…the dairy companies have relied on that emotional waiver from farmers, they've relied on them, this victim sort of almost stuff that goes on, which is shameful in some respects. But they're going to be up against it when the farming community transforms [and] the only people who are going to do it if it's going to make proper business sense, not my whole family are like spending their entire waking lives and getting up every day and all this kind of stuff' (Farmer Workshop, high-risk bTB area).

Detachment is therefore only imaginable as a tragic or traumatic event: a fundamental rupture in generational attachment to land. Exiting farming provides one option to farmers wanting to escape the politics and moral distress of disease control (Jaye et al, 2022), but this is not an option open to all and can leave farming households more socially and economically vulnerable (Anderson and McLachlan, 2012). Studies of farmers' poor mental health (for example, Convery et al 2008) associated with outbreaks of animal disease, also point to more tragic forms of detachment, as the accumulation of mental and emotional strains of

modern farming become unbearable (Anderson and McLachlan, 2012),

In this context, both the dream of eradication and the possibilities of detachment seem cruel: one reinforcing the other. Nevertheless, modes of detachment from the 'same old politics' of eradication were present, if not to the concept of eradication as a whole. These modes of detachment reflect partial and incomplete engagement with the aims of disease management such that detachment can be more accurately described as a form of 'attached detachment', that is marked more by a sense of ambivalence, indifference and resignation. Such modes of relation are similar to the concept of 'affective realism' (Roe and Greenhough, 2023): the process in which people rationalise continued attachment to cruel optimism (such as the idea of eradication) but in limited form, rather than questioning the concept as a whole and seeking out alternative solutions. Discourses of 'affective realism' were present in farmers' rationales for badger culling in which farmers presented arguments that culling was in fact less cruel than vaccinating. Farmers argued that they were not 'anti-badger' but concerned about their welfare and the implications of bTB for them. This can be traced to farmers' concerns about protecting healthy badgers and only culling 'dirty badgers' (Maye et al., 2014). Providing a good death through culling, rather than one putting badgers through the stress of vaccination was therefore seen as preferable.

Most obviously, however, these forms of affectual realism were evident in the burnout and disillusion felt amongst farmers that operated as a mode of incomplete attachment/detachment. Farmers' burnout and disillusion was accompanied by a resigned sense that bTB might never be managed properly because of the cruelty of the system. Prior to the optimism initially provided by the new approach, government approaches to bTB had endured a fatalistic approach by farmers: merely going along with control measures rather than engaging with them fully (Enticott, 2008). This mode of relation has similarities to other forms of indifference. Anderson (2021, p.197), for instance, describes how boredom is a 'symptom of burnout' that 'settles in places…left behind by a rapacious global capital'. The effect of this mode of relation dampens the intensity of an event which becomes 'nothing much at all' (Anderson, 2023, p.135) despite proximity and experience of it. Whilst this relation of detachment matches the experience of many farmers in the aftermath of the culling company policy, it can also mask attempts to remain attached for strategic purposes. This side of 'attached detachment' was evident in two ways. Firstly, where farmers supported in principle the concept of vaccine companies, this did not imply complete attachment. Rather, this continued attachment to the neoliberal model was partially detached because it retained a strategic hope that their preferred approach to disease management (culling) would return. This strategy of attached detachment took the form of playing the 'long-game' in which acceptance of vaccine companies, despite their apparent ill-suited nature, was essential to maintaining the use of culling in future. Thus, maintaining the use of culling also required abandoning it. As the following quote shows, farmers recognised the long game of politics that was required to secure support for culling. Simply walking away from vaccination would not gather the political support required. They recognised that they had to be part of a political game, even if they did not agree with it. Accepting vaccination companies – against all their lived experience of culling companies – was a trade-off worth making to sustain and maintain the hope of eradication through culling:

> "There is a wider silent majority who are probably looking on this debate and thinking well, we do love the wildlife don't we? But are they hard and fast in their opinions? And alright, if we are stopped from culling for, you know, a period, yes, the benefits of it might become apparent if we research them and publicise them, and then if things deteriorate, then that could be monitored and publicised and the silent majority… might actually change sides." (Farmer workshop, high-risk bTB area)

This mode of attached detachment was also evident in the unintended consequences of the politics of animal disease policy. As others have argued, the spirit of entrepreneurialism can be interpreted in relation to legal and illegal activities (Somerville et al., 2015; Smith et al., 2017; Smith & McElwee, 2013). For many of our participants, the reality of a policy shift away from badger culling would be to drive culling back underground where it would be undertaken illegally:

> "We don't want to be doing anything illegal. And it will happen, there's no question, but we're going to be criminals [agreement from the room], and we're going to be found out by people, some people are going to be brought to the dock. It could get very, very bad. And we don't wanna be in that situation, we're all in favour of the wildlife, but we've got to have some kind of control on it, because it's effective over the long, long period, all these little tiddly plans over the years and everything we've got…the culling works." (Farmer workshop, high-risk bTB area)

Attached detachment therefore encapsulates an ongoing commitment to disease eradication but detached through their indifference and fatalism from government's approach to disease management. In this way, the intensity of neoliberalism never overcomes the past (Anderson, 2021) but neither does its opportunity vanish. Thus, strategic attachments, playing a long game, and taking matters into one's own hands all reflect the partial and incomplete relation of attached detachment.

5. Conclusion

Like a disease, neoliberal policy logics of animal disease control have circulated the world. In tracing these policy mobilities, this paper has focussed on the policy lives of the neoliberal logic of ownership, both in terms of how policies evolve and are translated to local contexts, and the experiences of those people who come to enact the lives created by the logic of ownership. We argue that disease eradication can be seen as an alluring fantasy which is sustained by these circulating logics. This does not imply that disease eradication is not achievable, but just like neoliberalisation itself, as disease eradication is a socio-technical task, its form depends on local socio-political contexts. Thus, if eradication represents a dream-like fantasy, in some places – as one farmer suggested to us – this dream will slide into a nightmare. As the lived experiences of disease control policies described in this paper show, the circulation of logics of ownership contribute to a continued attachment to eradication, but in a way that farmers told us physically and metaphorically left them bruised, punished and exhausted. These emotional costs are frequently hidden in the attraction of transnational policy fixes (Peck & Theodore, 2014), thereby sustaining the fantasy of eradication: the very essence of cruel optimism (Berlant, 2011). This cruelty is also felt in the possibilities of detachment from a relation of cruel optimism. Detachment involves either traumatic or tragic choices, or failing to progress beyond partial and incomplete 'attached detachments'. In conclusion we draw attention to four key points.

Firstly, in relation to the transnational mobility of neoliberal animal disease policies, we show how negative affects – a toxic atmosphere of distrust and disengagement – provided ideal territory for culling companies' optimism to take hold. There are clear parallels between the policy logics adopted in England, and those in New Zealand and Australia. However, its successful mobility builds on previous activities in England by farmers themselves, laying the groundwork for the acceptance of this expression of policy ownership. That these early attempts were farmer-led rather than following a top-down policy process is also likely to have made them more acceptable to farmers. Claims of policy mobility and promises to 'learn from other countries' must be viewed in this context. In reality, such claims may have little geographical reality. Instead, as Offe (1996) suggests, claims of policy learning may work more as a means to serve political interests, and legitimise pre-existing policy preferences in the face of public and scientific opposition.

Secondly, in this policy life, the paper has shown how the affects of these neoliberal logics create the conditions for and reveal expressions of

Berlant's concept of cruel optimism. In tracing the policy lives of culling companies – the evolution of the policy itself and the lives of those responsible for it – we have shown how cruel optimism can be located in the incompleteness of neoliberalisation (Larner, 2003). As others have argued, neoliberalism is not a monolithic bloc, something that can be instantly recognised. Rather forms of neoliberalisation emerge and are shaped within specific contexts. This unfolding and translation is a key concern of studies of policy mobility. Here we see how a focus on 'living policy' is essential to understanding its own cruelty: without change and adaptation, its affectual future may have endured for longer. A focus on living policy reveals how in disease management, neoliberalisation is an incomplete project which is reluctant to redefine the nature of government. Following the life of culling companies reveals how government's paternalistic strings are not severed despite its promise of ownership. The lives of policy implementers – in this case farmers – too are never separated from government: despite the promises of a new dawn, both government and farmers remain embedded in the same relationships. The promise of culling companies is therefore cruel because it is built on unstable optimism.

Thirdly, culling companies also highlight the limits to the circulation of neoliberal affects at global and local scales. They also point to other forms of circulation that neoliberal logics may rely on. Burnout and drop out reveals there are peaks and troughs to enthusiasm. This could cause problems in the sense that policy options become constrained without the presence of volunteers. But volunteers may burnout and be replaced by others in a continuous cycle. Much like neoliberal approaches to labour in agriculture rely on unfixed labour, caring little for the effects of precarity, so we might imagine the cull company leaders in the same way: a victim of neoliberal logics that ironically care little for their emotional well-being. This may contribute further to the variegated landscape and local expressions that processes of neoliberalisation take. Indeed, in tracing the possibilities of detachment from a relation of cruel optimism, the partial and incomplete forms of 'attached detachment' reveal how these neoliberal approaches continue in diverse and unexpected ways.

Finally, whilst this paper has sought to explore cruel optimism within the context of animal disease control and the allure of eradication, there are likely to be a set of other fantasies to which attachment is problematic and which inform not just farmers responses to neoliberal logics of disease control, but also other agricultural and rural issues. In rural agricultural workplaces for instance, the allure of idealised professional subjectivities may conflict with the realities of work and the moral injuries inflicted by attempts to keep these dreams alive (Williamson et al., 2023; Doolan-Noble et al., 2023). Similarly, cruel optimism may be a feature of migrant workers' 'liminal lives' in which liminality provides a 'vital expression of migrant agency…but also serves the interests of capital' (Scott et al., 2022: 27). Perhaps most significantly, must be the dream of the 'family farm' and its generational continuity within a global neoliberal food supply system (cf. Glover & Reay, 2013). Attachment to land and the memories it holds, alongside a desire for a resilient farming future for the next generation, drives attempts to maintain these worlds, as demonstrated within the farmer protests of 2024 across Europe (Henley, 2024). As we have shown, detachment from these relations is challenging, more often marked by tragedy and trauma, than hope and optimism.

Detachment from the destructive economic relationships that underpin the modern food system – unfairness in the contractual relationship between farmers and processors, unwillingness of governments to regulate markets, and the pursuit of cheap food (Lang, 2021; Milbourne & Coulson, 2021) – would be the logical step. Instead, for the family farm to survive, harming it through continued participation in these worlds is an inevitable consequence. In fact, the dream of the intergenerational family farm intersects with the allure of eradication. Family farms are more likely to suffer the consequences of a bTB outbreak due to the vulnerability of their business model. By contrast, milk processors show no sign of engaging with the policy process because the public health concerns are eliminated through milk pasteurisation and/or meat inspection. Continued vertical integration of milk processing and the creation of large, corporate owned dairy farms that are able to live with bTB serves the neoliberal model of food supply. This paper therefore calls for further research into the harm of continued attachment to intersecting rural fantasies, the rationales that sustain them and productive forms of detachment rather than those that are tragic and traumatic that are associated with modern farming. In doing so, analyses of cruel optimism in the countryside should shed further light on the inequities of neoliberal life and the need for just transitions to facilitate detachment from harmful worlds.

Ethics statement: the authors confirm that the research projects contributing to this paper received appropriate institutional ethical approval.

CRediT authorship contribution statement

Charlotte-Anne Chivers: Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation. **Damian Maye:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Gareth Enticott:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary data

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