

1 This is the author's 'accepted manuscript' (i.e. final draft post-refereeing) copy of an
2 article published by Gorman in Elsevier's journal Social Science and Medicine, November
3 2017, the final publisher's version/PDF can be accessed online at:

4 <https://doi.org/10.1016/j.socscimed.2017.11.047>
5
6

7 **Thinking Critically about Health and Human-Animal Relations: Therapeutic Affect within** 8 **Spaces of Care Farming** 9

10 *This article draws on a more-than-representational approach to reconsider how*
11 *geographers engage with ideas of 'health'. Health can be understood as the constant*
12 *reshaping of an individual's capacity to affect and be affected, the way in which a body's*
13 *powers to act are dynamically augmented or diminished by different affective relations.*
14 *The article also addresses calls for health geography to engage with the more-than-*
15 *human. The article mobilises a qualitative study of 'care farming' within England and*
16 *Wales to highlight the generative potential of human-animal relations in (re)shaping the*
17 *diverse affective relations gathered together to produce new bodily capacities. The article*
18 *demonstrates how animal presence and agency can break down barriers, allowing people*
19 *to navigate and negotiate adverse contexts and access support in a manner and space in*
20 *which they feel comfortable. Additionally, human-animal relations are shown to produce*
21 *affective experiences that act to re-place identities, understandings, and ways of 'being-*
22 *with' the world that can enact what different actants may become. Human-animal*
23 *relations matter for health.*
24

25 Keywords: Health Geography; Human-Animal Relations; Health; Care Farming; Health and Place; UK
26
27

28 **1. Introduction** 29

30 Despite health geography's interests in exploring and explaining the interrelations between
31 health and place, 'health' as a concept itself is often left undefined, un-interrogated, and
32 unpacked, frequently taken as a given, an external and universal 'thing' to be acquired,
33 restored, or maintained. Within this article I reconsider and reconceptualise how health
34 geographers approach and engage with ideas of 'health' and 'the therapeutic', focussing on
35 the generative potential of situated relations, and how ongoing lines of flight (Deleuze &
36 Guattari, 2008) continue to shape affective capacities and therapeutic possibilities. Alongside
37 these broader conceptual aims, I am also interested in how animals have been marginalised
38 within health geography (Conradson, 2005; Gorman, 2017b). Drawing these themes together

1 utilising an empirical study of 'care farming' practices in England and Wales, I explore how
2 human-animal relations can shape and reshape bodily capacities, affecting an individual's
3 capabilities and opportunities to function and flourish. In doing so, the article attends to calls
4 by numerous authors (Andrews et al., 2014; Hanlon, 2014; Milligan et al., 2007) to more
5 critically explore the role of the non-human within geographic understandings of health, as
6 well as contributing to recent efforts within health geography to develop fresh
7 understandings of the value and analytical utility of affective accounts of health.

8

9 **2. Thinking about Health**

10

11 Health is a multifaceted concept. It can refer specifically to physical and bodily health and the
12 absence of diagnosed diseases, but also captures the many different dimensions and relations
13 that impact everyday, lived, corporeal, emotional, and social wellbeing (Curtis, 2004).
14 However, the specific nature of health and wellbeing are rarely foregrounded in geographic
15 writing, and are, as Andrews (2007) argues, instead frequently deployed as rather vague and
16 indirect terms suggestive of some degree of happiness, contentment, or quality of life.
17 Research has missed the opportunity to explore health and wellbeing at a more 'immediate'
18 level, exploring the processes through which health and wellbeing emerge (Andrews et al.,
19 2014).

20

21 Within this article, I draw on health, not in a biomedical or functionalist sense of a simple
22 absence of 'ill-health', but rather in terms of the affects or relations a body possesses. In such
23 a framing, health is processual, not simply a 'state' of an ontologically prior body, nor an
24 outcome to be achieved, but instead dynamically and relationally constituted (Fox, 2002,

1 2011). New relations produce new 'bodily capacities' and close down existing ones
2 (Buchanan, 1997); though this is not an either-or dualism, simply the processes at play within
3 a 'becoming healthy' (Fox, 2011). 'Bodily capacities' here refer to a body's power(s) to act,
4 and the ways in which competencies are acquired, cultivated, maintained, and advanced
5 through the provision of new affective sensitivities (Duff, 2010, 2011). These 'capacities'
6 highlight the capability of bodies to enter into relations with other bodies and experience
7 diverse affects. A continuous modification and transition of a body's competencies and
8 potential for action (Duff, 2010) that transforms a body's potency to 'do different things' and
9 'perform different actions' (Emmerson, 2017, 11). Health can thus be conceptualised as the
10 proliferation and transformation of the 'capacity to affect and be affected' (Deleuze &
11 Guattari, 2008; Fox, 2011).

12

13 Affect is a concept increasingly utilised within geography (though less so in health geography).
14 It is 'used to describe unformed and unstructured intensities that, although not necessarily
15 experienced by or possessed by a subject, correspond to the passage from one bodily state
16 to another and are therefore analysable in terms of their effects' (Anderson, 2011, 8). Duff
17 (2010, 2011), draws on the philosophy of Deleuze and Guattari to explore how affect applies
18 to health and suggests that:

19

20 Affects are an emergent effect of the body's manifold encounters, with each
21 encounter transforming the nature of the body's characteristic relations and
22 hence its manifest capacities (Duff, 2010, 626) [...] Affects are a lived moment
23 of action-potential and they convey a body's durational and dispositional
24 orientation to the world [...] every encounter subtly transforms an individual's

1 affective orientations, either to enhance that individual's power of acting or to
2 diminish it (Duff, 2011, 153).

3
4 Fox (2002, 2011, 2016) too uses the philosophy of Deleuze and Guattari to argue for a
5 conceptualisation of health where health is defined by what a body can do, its capacities and
6 limits, rather than what it is. Treating health in this way recognises the interconnectedness of
7 all things and thus situates the 'health' of a body within an assemblage of shifting and
8 fluctuating biological, psychological, cultural, economic, and abstract relations to other
9 bodies, objects, technologies, ideas, and social organisations. In this way health becomes not
10 simply passively inscribed and territorialized indefinitely, but something which can be
11 resisted, subverted, and deterritorialized by other forces, dependent on affective relations
12 (Fox, 2002). 'Health' becomes a precarious relational achievement, produced through the
13 diverse relations, elements, and affects gathered together, shaped and potentialised by
14 ongoing 'lines of flight' (Deleuze & Guattari, 2008).

15
16 We may understand 'health' as – at least in part – the resistance of body-self
17 to forces of territorialization. Resistance is not only a possibility: it is the
18 character of the body-self as it refracts the affects and relations which impinge
19 upon it. As has been noted, these include physical and biological, psychological
20 or emotional, social and cultural relations, and the body-self uses these
21 strategically to define what it can 'do'. So, the 'health' of a body is the outcome
22 of all these refracted and resisted relations, biological capabilities or cultural
23 mind-sets, alliances with friends or health workers, struggles for control over
24 treatment or conditions of living. Health is neither an absolute (defined by

1 whatever discipline) to be aspired towards, nor an idealized outcome of ‘mind-
2 over-matter’. It is a process of becoming by body-self, of rallying affects and
3 relations, resisting physical or social territorialization and experimenting with
4 what is, and what might become. (Fox, 2002, 360)

5

6 Importantly though, and to build on Fox, these relations that converge to define what a body
7 can do are neither isotopic, synchronic, synoptic, homogeneous, nor isobaric (Latour, 2005,
8 200-201). Childhood encounters that result in phobias of medical staff and spaces continue
9 to shape the opportunities which people have to build ‘alliances with health workers’ and the
10 many other ways relations entangle to co-constitute an understanding of ‘health’, what Fox
11 (2011, 2016) calls a ‘health assemblage’.

12

13 Recognising Deleuze and Guatarri’s emphasis of territories and milieus (Bonta & Protevi,
14 2004), there is an opportunity for health geographers to engage with this idea of ‘health
15 assemblages’ and explore the material and immaterial elements of particular environments
16 and how they come to be ‘important vectors of affective transmission in the body’s power of
17 acting’ (Duff, 2010, 629). Bodies and places become fluidly entangled in a relational co-
18 production of ‘health’; health is affected by, through, and in place. Though importantly, this
19 is not about exploring spaces where an individual may ‘move towards wellbeing’ (Conradson,
20 2003, 511) with health and wellbeing existing as achievable, final, and fixed states. Instead,
21 the focus moves towards exploring the processes and relationships involved in the production
22 and reproduction of constant and ceaseless experiences of ‘becoming healthy’. Health is
23 continuously (re)shaped by an environment, as opposed to something that results, or is taken,
24 from an environment (Andrews et al., 2014). Encounters in place subtly transform ‘an

1 individual's affective orientations, either to enhance that individual's power of acting or to
2 diminish it' (Duff, 2011, 153).

3

4 This 'affective turn' as it might be conceptualised, allows something slightly different to be
5 'brought to the table' of contemporary health geography, presenting the world as a lived,
6 immediate, continually moving performance, and exploring the variegated ways life presents,
7 manifests, and feels in its most basic forms (Andrews, 2018). Such an approach allows for a
8 conceptualisation of health as something 'unstable and amenable to immediate change,
9 something both individual and collective, something both consciously and less-than-fully
10 consciously known, thus as something both subjective and objective' (Andrews, 2016b, 212).
11 Shifting the focus to the fundamental energies and liveliness of humans and other beings, and
12 the ways health is co-produced and shared between bodies (Andrews, 2018).

13

14 **3. Animals and Health Geography**

15

16 The longstanding approach within health geography has been to put 'people centre stage'
17 (Andrews, 2015, 338), an approach which has resulted in anthropocentric geographies of
18 health (Gorman, 2017b). Laws and Radford (1998) have previously noted that there has been
19 a need for geographies of health to engage with 'the other', however this does not appear to
20 have been taken up in respect to non-human others. To quote Conradson (2005, 339), the
21 health geographies literature has seen 'rather less consideration of the non-human entities
22 (plants, animals, micro-organisms) and created objects (homes, computers, cars) which also
23 feature significantly in contemporary place-making'. However, increasingly, non-human life
24 is being utilised (and commodified) in attempts to produce affective healthful encounters,

1 from cat cafes (Plourde, 2014) to care farms (Gorman, 2017b), Pets-As-Therapy dogs on
2 hospital wards (Pets As Therapy, 2016) to ‘puppy rooms’ on university campuses (BBC, 2015);
3 animals are increasingly imbricated within the geographies of health.

4
5 Thus here, I attend to Hanlon’s (2014, 144) calls for health geography to widen its accounts
6 of place to consider the ‘ways in which bodies not only interact, but co-evolve with things
7 (e.g. physical infrastructure, technologies) and other beings (i.e. not simply other people, but
8 pets, livestock, wildlife, insects, and so on)’. Places that can affect health are comprised of
9 ‘rich ecologies of the human and the non-human, the social and the natural, the material and
10 immaterial’ (Murdoch, 2006, 127). Any ‘thing’ that modifies a state of affairs by making a
11 difference, producing affects, or altering the course of events is an actor (Bennett, 2010;
12 Latour, 2005). This is not to say that these things determine, cause, or impose action (Latour,
13 2005). Rather, such an approach implies that there are many shades of causality – ‘things
14 might authorise, allow, afford, encourage, permit, suggest, influence, block, render possible,
15 forbid, and so on’ (Latour, 2005, 72). Things are vital players in the world, efficacious existents
16 in excess of their association with human meanings and contexts (Bennett, 2010).

17
18 Drawing on Bennett’s (2010, 3) discussions of the agency of non-human things, the idea that
19 ‘things do in fact affect other bodies, enhancing or weakening their power’ returns to a
20 conceptualisation of health defined by what a body can do, its capacities and limits. Similarly,
21 Hinchliffe (2007, 25) describes how ‘plants, animals, and non-living matter may co-evolve and
22 produce opportunities and constraints for one another through all manner of relations’.
23 These ideas of ‘producing opportunities and constraints’ and ‘enhancing and weakening
24 power’ provide a useful means to consider how human-animal relations can co-produce

1 therapeutic possibilities, enabling and enacting what different actants may become. Animals
2 (and other non-human things) can alter the relations that bodies have, shaping and reshaping
3 practices and flows of becoming.

4

5 **4. Exploring Health**

6

7 Duff (2010) calls for exploring the relations that bodies have to explore a person's health. This
8 article thus concerns itself with exploring the situated spatial relations between humans and
9 animals to critically discuss how the presence and agency of animals can shape and reshape
10 capacities to affect and be affected. Before moving to discuss this in more detail, I firstly
11 explore the contextual and empirical settings that underpin and emplace these deliberations,
12 as well as explaining the methodological practices which enabled and produced this study.

13

14 **4.1. Contextualising Care Farming**

15

16 The empirics for this article were collected during a study of Community Supported
17 Agriculture, a system of food production and distribution aiming to involve local communities
18 in the growing and rearing of their food. Wells and Gradwell (2001, 117) describe CSA as a
19 form of 'caring practice', and many CSA farms are often connected with producing health
20 benefits (Press & Arnould, 2011). Many CSAs invite groups that might 'benefit therapeutically'
21 (Charles, 2011) onto their farms, with CSAs functioning, sometimes explicitly, sometimes
22 implicitly, as 'care farms'. Care farming is a place-based intervention in which agricultural
23 settings and practices are utilised to provide care for vulnerable groups (Gorman &
24 Cacciatore, 2017), in what Hassink et al. (2010) describe as part of the wider shift from

1 institutional to socialised and community care. Though equally, care farming can also be
2 considered through a lens of neoliberalization, and be seen as an effect of the state
3 withdrawing from responsibilities of care. In Kraftl's (2014a, 62) work, he reports that farmers
4 engaging in care farming felt under increasing pressure to take up 'the burden' of public
5 service withdrawal. Care farming might thus be considered a shadow state activity (Wolch,
6 1990) that (to borrow an excellent pun from a reviewer) farms out the care of vulnerable
7 groups to enterprises not established nor intended to do this type of work.

8

9 In the UK, care farming involves providing care, rehabilitation, therapeutic, and educational
10 programmes for people with learning difficulties, disaffected youth, and people experiencing
11 ill-mental health (Hine et al., 2008). Some farms provide specific therapies and interventions,
12 whilst others take a more passive approach whereby they actively invite groups to make use
13 of the farm environment for volunteering, contact with 'nature', and other outdoor social
14 activities. The wide variety of 'client groups' that attend care farms can often make it difficult
15 to disentangle the types of benefits that visitors receive, for some the therapeutic benefits of
16 care farms may be about education and the enhancement of their employability and skills
17 (see Kraftl (2014b)), whilst for others (particularly those with more severe disabilities)
18 attending a care farm is much more about the respite opportunities that the farm can offer.
19 Here I position care farming as a set of relationships and practices emergent in agricultural
20 spaces that can produce new bodily capacities or close down existing ones.

21

22 As Conradson (2005, 346) argues, 'in order to understand a particular therapeutic landscape
23 experience, it is useful to give attention to the broader relational configurations within which
24 it occurs', and this applies equally to therapeutic encounters with animals. Given the

1 agricultural context, the vast majority of animals encounterable within spaces of care farming
2 are domesticated species. Domestication has resulted in certain sets of relations across
3 species that enable and enact particular biosocial formations and relational practices, through
4 which humans and non-humans mutually inhabit each other's worlds. These sets of relations
5 are informed by long histories of entangled becoming with other species. Lien (2015)
6 describes agricultural sites as fragile spaces of beings and things that, while they precariously
7 hold together, define and enact what humans and non-humans alike may become, processes
8 of becoming which I move to showcase shortly.

9

10 **4.2. Methodologies**

11

12 During 2015, 55 semi-structured interviews were conducted with representatives from
13 Community Supported Agriculture projects across England and Wales, as well as with
14 representatives from groups who visited these farms for therapeutic purposes. Alongside
15 these interviews, ethnographic observation was mobilised to explore peoples' everyday lived
16 experiences, relationships, and encounters on the farms.

17

18 While more-than-human and affective research can both trouble the interview as a method,
19 Dowling et al. (2016) argue that conventional methodological approaches open generative
20 possibilities. Rather than jettisoning the interview, it becomes about re-imagining
21 interviewing, in ways that allow for 'reflections on processes of becoming affected' (Dowling
22 et al., 2016, 4) and creating space for people to tell stories about affective connections and
23 events (Goffey & Pettinger, 2014). In this way, using interviews to explore the intense,
24 affective, emotional, and embodied relationships between heterogeneous actants, and

1 revealing the agency of more-than-human elements in the co-production of certain forms and
2 affective states (Dowling et al., 2016).

3

4 The interviews sought to discover how interviewees viewed their relationships and
5 encounters with animals, and to what extent the farms viewed themselves and their animals
6 as having some form of therapeutic affect. Tsing (2010) argues that multispecies studies
7 require mobilising the talents and knowledge of those close to, and passionate about,
8 animals. Making use of the dwelt and situated knowledge of the people who live with, work
9 with, and encounter animals on a day-to-day basis can provide useful knowledge about
10 animals themselves and the affective relationships which humans have with them. Interviews
11 with individuals currently embedded in long-term relationships with specific animals can shed
12 light on affective practices and relationships at play within multispecies communities
13 (Johnston, 2008).

14

15 However, interviewing only gives a viewpoint to certain elements, affects, and
16 representations (Mazzei, 2013). For this reason, a farm was chosen (drawing on the case
17 selection criteria developed by Curtis et al. (2000) for qualitative research in health
18 geographies) for regular participant observation between March and September 2015. The
19 chosen farm aimed to provide opportunities for a wide range of organisations within the local
20 area, and had developed personal relationships with several local agencies looking for
21 therapeutic and educational volunteering opportunities for their 'client' groups (see also,
22 Gorman (2017a). The groups that came to the farm tended to be fairly heterogeneous, as
23 Dave, an outdoor activities coordinator on a local council scheme for young people not in
24 education, employment, or training explains: '*we work with people at risk of substance abuse,*

1 *criminal justice system, homelessness, and a range of different partners*'. Groups would visit
2 the farm once a week, and get involved with a range of agricultural tasks that contributed to
3 the upkeep of the farm.

4
5 These observations on the farm provided a way of 'bearing witness to life's momentary acts
6 and their multivariate expression' (Lorimer, 2010, 75) and exploring the everyday lived
7 human-animal relationships emergent within the places, practices, and performances of CSA
8 and care farming. This involved paying attention to the inchoate and processual life of the
9 places I was emplaced within (Dewsbury, 2003). This 'witnessing' allowed me to 'get
10 embroiled in the site and allow [myself] to be infected by the effort, investment, and craze of
11 the particular practice of experience being investigated' (Dewsbury, 2010, 326).

12
13 The aim was to trace how the lives of the humans, and the lives of the other animals within
14 the 'common worlds' of the farm were 'entangled, interconnected, mutually dependent, and
15 therefore mutually 'response-able'' (Pacini-Ketchabaw et al., 2016, 151). A process of
16 cultivating a sensitivity towards the other, that is, to quote Haraway (2008, 71), 'a relationship
17 crafted in intra-action through which entities, subjects and objects, come into being'.

18
19 Following the conclusion of interviewing and participant observation, all transcripts and
20 fieldnotes were imported into NVivo for coding and analysis. The analysis took a 'messy'
21 approach, acknowledging that data does not fit into neat categories, and embracing rather
22 than sacrificing the complexity and open-endedness of phenomena (Law, 2007). The process
23 was not an attempt to uncover some hidden truth within the data, but rather an attempt to

1 identify recurrent themes and patterns of relations, exploring some of the stories of
2 interconnection between humans, animals, and healthful experiences.

3

4 **5. Health and Human-Animal Relations**

5

6 Exploring care farming provides an opportunity to critically consider how different human,
7 animal, and material assemblages are brought together to enact affective therapeutic
8 possibilities in different ways. Building on Gorman (2017b), and in a commitment to focus on
9 the 'taking place' of health (Andrews, 2016a), I am interested in the generative potential of
10 situated human-animal relations in (re)shaping the diverse affective relations gathered
11 together to produce new bodily capacities.

12

13 In the spirit of this special issue on the 'lessons for critical human geography from people's
14 diverse struggles to find health and wellbeing in adverse contexts' there are two particular
15 themes which emerge as especially relevant. Firstly, I explore how animal presence and
16 agency can lead to a breaking down of barriers, and an increased desire to participate and
17 engage in certain therapeutic processes and places that then leads to an opening up of bodily
18 capacities. Understanding how non-human life can be (and is being) utilised as a strategy to
19 procure and produce interest and attendance in health and care interventions offers an
20 important consideration for recognising the differing routes through which people come to
21 experience health and wellbeing. Drawing on these discussions, I examine how animal
22 encounters are utilised in the building of a sense of belonging within spaces of care farming,
23 investigating how human-animal relations can affect what a body can become. The
24 encounters and relationships between humans and animals within the farms can come to

1 produce affective experiences that act to re-place identities, understandings, and ways of
2 'being-with' the world.

3

4 **5.1. Breaking Barriers**

5

6 Animals can provide an attraction and incentive for visitors, a reason to show up and get
7 involved, encouraging and sustaining retention rates. For many of the visitors to the farms I
8 worked with, it was the specific possibility of seeing animals that led them to participate and
9 attend various group activities:

10

11 *Dan explained that more lambs would be born soon, over the next few weeks,*
12 *this seemed to be a real positive for the group, with many of the visitors saying*
13 *how they would definitely be coming back for more of the sessions on the farm*
14 *so that they could see more of the lambs. [Fieldnotes, 19 March 2015]*

15

16 The opportunity to encounter animals was used to invoke interest amongst visitors, breaking
17 down barriers to participation. As Dave, an outdoor activities coordinator on a local council
18 scheme for young people not in education, employment, or training, puts it: *'if they don't like*
19 *something, it's usually two fingers up and they won't come back, but they obviously enjoy the*
20 *experience [...] if people feel happy, they'll come back'*. Animals can act as a solution to
21 disengagement. The attraction and novelty of encountering and interacting with something
22 'cute', like the lambs in the above example, or alternatively, 'macho', thinking about the larger
23 dairy animals and tropes of 'cowboys', serves as a remedy to disinterested bravado. In this
24 way, animals can create a space of engagement, transforming spaces and practices associated

1 with health and wellbeing from rigid and uninspiring into something more fascinating and
2 attractive, achieving buy-in and attendance.

3

4 Discourses around care farming practices often draw on the idea that agricultural activities
5 are more 'normal' (de Krom & Dessen, 2013), producing a context that is 'closer to normal
6 life than conventional care services' (Hassink et al., 2010, 427). While it is certainly fair to say
7 that the presence of animals disrupts conventional and clinical norms when it comes to
8 healthcare practices, the idea that these spaces are 'normal' is far from true. For many
9 visitors, like Dave's young people, it is the extraordinary nature and difference of being able
10 to interact and encounter animals which leads to their desire to participate in the programme.

11

12 Indeed, for many of the young people that visited the farm, animals also served to constitute
13 a more equitable space. The social workers and probation officers (who would often
14 accompany the group on visits to farms) had a chance to talk to and work with their relevant
15 'clients' in a very different kind of environment than in an office from behind a desk, leaving
16 more hierarchical structures and spatial features behind in favour of instead working together
17 collecting eggs or herding sheep. Animals in this way provide a space where people feel at
18 ease in their discussions (Milligan et al., 2015) opening up new forms of being-with others.

19

20 *The idea of going out on activity with young people gives them [social workers]*
21 *an opportunity to get to know them and mentor them in a different kind of way*
22 *[...] but with being outside, it almost breaks down number of barriers, that they*
23 *feel as though they can express themselves a lot more, and I know, that*
24 *speaking to the clients, you develop a bit more of a conversation than say*

1 *around the table, in classroom environment, people open up and they're a lot*
2 *more willing to talk about different things. [Dave, an outdoor activities*
3 *coordinator on a local council scheme for young people not in education,*
4 *employment, or training, Wales]*

5

6 Coming to the farm and encountering animals acts to re-engage the visitors, and expand the
7 opportunities they have. The added interest and pride created from relationships with
8 animals inspires an additional level of engagement from visitors and uptake in skill
9 accrue ment and development processes – an affective encounter with the farm animals that
10 resulted in an augmenting of an individual's capacities. For example, Diana explained to me
11 that at the end of a day's activities at the care farming programme she managed at a CSA in
12 England, the visitors would sit down and write a diary entry about the various tasks they had
13 completed on the farm working with the animals that day:

14

15 *If you just saw how some people's handwriting and their confidence in writing*
16 *has increased, we've got one lad, and his mum says, he's learnt more reading*
17 *and writing here in the last 6 months than he did in 6 years at school, coz he*
18 *was so proud of what he's done, he wants to write down, that he did this, and*
19 *he did that, and he did that, he wants to write it down, while at school he*
20 *couldn't be bothered.*

21

22 Providing 'care' can in itself produce significant benefits and new bodily capacities and
23 relations (Milligan & Wiles, 2010); the care practices and experiences within the farm are
24 multidirectional. The opportunity to care for something can make visitors to the farms feel

1 good about themselves, creating a medium for the expression of altruism. As Milligan (2006,
2 326) describes, a carer's 'own sense of health and wellbeing is intimately bound up with the
3 health and wellbeing of the care-recipient'. Milligan's argument equally applies to human-
4 animal relations. Caring for the farm's livestock and contributing to the animals' health and
5 wellbeing offers visitors a purpose, and allows them to position themselves as moral agents,
6 capable of having an impact, as Alys explains:

7

8 *Taking responsibility for animals was a big thing, for a lot of our students, you*
9 *know, they're not even taking care of themselves in lots of circumstances, so*
10 *for them to have the responsibility of changing the water and getting the hay*
11 *or putting the beds out or whatever, for them, that I think, has an effect on*
12 *their wellbeing, because, you know, you're giving them a level of responsibility*
13 *which they've never had. [Alys, staff member taking students with learning*
14 *disabilities to animal projects, Wales]*

15

16 These relationships between humans and animals highlight the way in which human
17 experiences and understandings of health and place are co-produced by more-than-human
18 actants (Gorman, 2017b). However, animals are not simply used just to attract visitors to the
19 spaces of the care farms, as this section has begun to highlight they are also important actants
20 that enable the farms to influence the many different relations which are drawn together to
21 define what a body can do. I explore this in more detail now, discussing how human-animal
22 relations can produce a sense of belonging and other new affective capacities.

23

24 **5.2. Building Belonging**

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

Encounters with the animals on the farm often served to expedite new forms of contact between humans, providing opportunities for social reciprocity, the gaining of social capital, and the development of a sense of place and belonging.

That gets the communication going, with the animals there, you've got a fun connection with the person, a member of the public, so that's, again, and the communication skills, for some of the people, they wouldn't even talk to someone when they started, and now, they're like, 'oh yeah look at my rabbit, would you like to have a stroke', talking about it. [Georgina, animal coordinator of a care farm, based on a CSA in England]

Contact with the farm animals becomes a way of reframing visitors to the farms, expanding their self-confidence and self-image. Rather than 'care-recipients', the visitors come to be cast as experts and practitioners, their close knowledge of the non-humans co-habiting the space elevating their status, creating new ways of interacting with others, and developing a further sense of belonging within both the community of the farm, as well as society at large. As Georgina demonstrates above, for many of the visitors to the farm, this becomes a hugely transformative experience. There are links to the idea of emplacement here. Andrews et al. (2006, 154) describe how places can serve as 'crucial material and symbolic sources for biographical development and, as such, make an essential contribution to the construction of personal identity'. Here it is vitality of animal life that allows for a (re)construction of personal identities for many of the visitors. Animals serve as an 'experiential anchor' (Andrews et al., 2006), that produce new flows of becoming and ways of being-with the world. In a context of

1 migration, Gastaldo et al. (2004) discuss how displacement creates an opportunity for
2 therapeutic affect and a reconstruction of one's subjectivity. This displacement does not have
3 to be a physical movement, but a displacement in how one is categorised and understood by
4 others, ones' placement in social hierarchy. Relations with animals can position a person as
5 "someone' in a given place' (Gastaldo et al., 2004, 172) deterritorializing preconceived
6 notions of ability and alienation, as Siôn describes:

7

8 *There's a lot of achievement as well, you get that actual initial, just do the job,*
9 *but there's always something, you can always see the positive from it, there's*
10 *always something that's been established or something that's been done, the*
11 *success is massive, it gives them a massive boost to confidence, that bit of self-*
12 *esteem to show that they can do things. [Siôn, a physical activity leader on a*
13 *local council scheme for young people not in education, employment, or*
14 *training, Wales]*

15

16 In this way, human-animal encounters on the farm produced certain emotional states and
17 shaped how people experienced place in ways meaningful to their health. The emotive
18 dimensions of human-animal relations can come to enhance visitors' capacities to affect and
19 be affected, to thrive and flourish, enabling functionality and opportunities (Duff, 2010).

20

21 However, rather than just facilitating contact among different humans, animals also provide
22 'social' contact themselves. This was cited by many of the farmers and facilitators as being a
23 particularly important part of the farm experience for visitors, as rather than reifying
24 'threatening structures' and 'institutional settings' (Andrews & Andrews, 2003, 542) from

1 which several of the visitors (in Dave's group) had been excluded or alienated from, animals
2 instead provided a new, and importantly, different, modality of social contact and sense of
3 belonging. The opportunities for companionability and relationships with animals came to
4 produce new affective capacities for many of the visitors, as Alys demonstrates:

5

6 *This one particular student, you know, doesn't look staff in the eye, but was*
7 *very much engaged with the dog, was very much calling the dog behind us,*
8 *checking he was there, you know, we would move location, he'd check with the*
9 *dog 'come on Rex, come this way'. So, some students were engaging through*
10 *the animals more than the people [...] students just enjoy that interaction with*
11 *another being. [Alys, staff member taking students with learning disabilities to*
12 *animal projects, Wales]*

13

14 Individual animal preferences become important as a way of accessing an ethos of
15 engagement that attunes individuals to a possibility of human-animal relations producing
16 some form of therapeutic affect. For example, for several visitors, like Alys' student, their
17 personal love of dogs was clearly important in how they came to experience the farm space
18 in ways conducive to their health assemblage.

19

20 There was often a high level of anthropomorphism towards the animals on the farms. Serpell
21 (2003, 91) claims that anthropomorphism is 'what ultimately enables people to benefit
22 socially, emotionally and physically from their relationships with companion animals'. Serpell
23 argues that the attribution of human emotions, characteristics, and behaviours to non-
24 humans (fictitious or not) is crucial in creating meaning and value in human-animal

1 encounters. The ability to relate to animals becomes an important way in how people come
2 to experience new affective capacities as a result of their encounters. Indeed, a frequent claim
3 from visitors was that the sheep and lambs were excited to see them. The animals would
4 certainly gallop over to the fence when humans approached, however, taking a more
5 pragmatic view, this was more likely to be due to the conditioning of feeding activities taking
6 place at the fence, rather than an innate desire for human contact on the part of the sheep.
7 However, for the visitors, the sheep valued them, and that was what mattered, and became
8 a crucial reason the visitors experienced the place of the farm as somewhere that produced
9 new bodily capacities; how they interpreted their relationships with animals made them feel
10 valued.

11

12 The presence of animals altered how people navigated the farm spaces, visually, physically,
13 and emotionally; lingering to enjoy interactions with animals, taking (and making) time to stay
14 and relax. This is similar to Milligan et al.'s (2004) discussions of how places relationally
15 constituted as aesthetically beautiful can impact on peoples' health assemblages through
16 providing an opportunity and space for thinking through unresolved problems. However, here
17 it is specifically the presence of animals that co-produces this relationship. As Lorimer (2007)
18 describes, animals have an 'aesthetic charisma' – appearances and behaviours that trigger
19 instantaneous affections and emotions. Animals serve as a form of escapism for many of the
20 visitors, a trigger which attunes them to their topographic location, and can lead people to
21 put aside external and extraneous worries, through having something specific to interact with
22 and to focus on. Though importantly, relations do not have to be rooted in physical contact
23 or in specifically therapeutically coded activities, animals can help to constitute a sense of
24 belonging in a myriad of different ways. Relationships with animals can be resonant and

1 sonorous, rather than just physically mediated. Animal sounds can (re)shape experiences of
2 place, triggering memories and a sense of familiarity, whilst equally the smell of animals can
3 facilitate an emotionally evocative engagement with place (Gorman, 2017a).

4

5 Animals are an important part of an engagement with health and place, specific actants which
6 individuals enter relationships with. These relationships and encounters can break down
7 barriers, allowing people to navigate and negotiate adverse contexts and access support in a
8 manner and space in which they feel comfortable. Equally, animals' very presence and agency
9 can become crucial in building a sense of belonging and creating new lines of flight.
10 Relationships with animals can serve as a catalyst that produces new ways of being-with the
11 world.

12

13 **6. Conclusion**

14

15 Health and place are deeply intertwined. Situated and embodied encounters and experiences
16 in place can affect what a body can do; the relations and affects that shape and reshape bodily
17 capacities and limits. Such an approach to conceptualising health offers a new way for
18 geographers to critically engage with the dynamic interrelations between health and place.
19 Importantly though, as I have shown, the opportunities and constraints that emerge from
20 place are (re)shaped by relations with animals. Human-animal relations and encounters
21 produce new ways of being in place. New emotions emerge from human-animal relations,
22 along with new knowledges, experiences, socialities, and ways of thinking about and
23 understanding oneself and one's place in and with the world. These relations can produce
24 new bodily capacities, affecting an individual's capabilities and opportunities to function and

1 flourish. Human-animal relations act to (re)define, (re)enact, and (re)enable what a body can
2 become.

3

4 Although the focus here has been on the healthful benefits of human-animal relations, it's
5 important to recognise that these human-animal relations are not taking place in isolation.
6 They are shaped by long histories of entangled becoming with other species (Lien, 2015),
7 facilitated through the actions and knowledges of farmers like Dan, influenced by existing
8 bodily capacities, and all of the other elements drawn together to produce the therapeutic
9 assemblage (Gorman, 2017b).

10

11 This article has demonstrated how situated relationships with animals have a generative
12 potential for shaping what a body can do. Whilst my focus here has been on the emergence
13 of health within the context of CSA farms, as mentioned earlier, there are an increasing range
14 of settings where non-human life is imbricated in the opening up of therapeutic possibilities;
15 from the hospitals and care homes visited by 'Pets-as-Therapy' dogs (Pets As Therapy, 2016),
16 to the 'puppy rooms' increasingly appearing on university campuses to help students cope
17 with exams (BBC, 2015). Besides these more formal healthcare settings, there are also
18 opportunities for future research to explore health in the context of people's everyday lived
19 relationships with animals, whether brief affective encounters with rats (Clayton, 2016) or
20 on-going relationships with pets (Fletcher & Platt, 2016), and how these relations play out in
21 enacting, defining, and enabling what bodies can do, regarding people's (and animals') health.

22

23 Additionally, Del Casino (2016) has recently called for interrogating the role of robots in the
24 production of 'caring spaces'. There are large parallels and the potential for vast crossover

1 here, given the often hybrid nature of such robotic care-technologies which draw on the
2 animality and charisma (Lorimer, 2007) of animal species. For example, 'Paro', the robotic
3 baby harp seal, intended to act as a companion and prevent isolation, is built to mimic aspects
4 of animal-assisted-therapy (Mort et al., 2013).

5

6 'Robotic pets' in this way are often designed with older people in mind (Mort et al., 2013),
7 and geography's growing interest in the gerontological (Andrews et al., 2009) provides an
8 interesting setting to consider human-animal relations and issues of health and wellbeing.

9 There are questions to be asked of how human-animal bonds influence and disrupt a
10 transition to formal care (on the part of both human, and animal). Though equally, there are
11 opportunities to explore the role of animals in developing a sense of place and belonging for
12 children in care, an issue which Holland (2009) calls for greater attention to. The attachment
13 and bonds which looked-after-children form with foster families and other care-givers are not
14 just with humans.

15

16 One of the founding messages during the emergence of the 'new geography of health' was
17 that health is experienced within place (Kearns, 1993). Building on this, I want to close by
18 arguing that health is experienced and co-produced together with more-than-human others.
19 Place is affected by health, and health is affected by place (Gastaldo et al., 2004); both are
20 affected by human-animal relations.

21

22 **Acknowledgements**

23 This research was conducted as part of a 3-year Ph.D. scholarship, jointly funded by an
24 Economic and Social Research Council studentship (grant reference ES/J500197/1) and a

1 Cardiff University President's Scholarship. I am grateful for the input and suggestions of the
2 two anonymous reviewers who read an earlier version of this manuscript. I would also like to
3 thank Christopher Bear and Geoffrey DeVerteuil for their helpful comments in developing this
4 research.

5

6 **7. References**

7

- 8 Anderson, B. (2011). Affect. In D. Gregory, R. Johnston, G. Pratt, M. Watts, & S. Whatmore
9 (Eds.), *The Dictionary of Human Geography*. Malden, Mass: Blackwell.
- 10 Andrews, G.J. (2007). Spaces of dizziness and dread: navigating acrophobia. *Geografiska*
11 *Annaler: Series B, Human Geography*, 89, 307-317.
- 12 Andrews, G.J. (2015). The lively challenges and opportunities of non-representational theory:
13 a reply to Hanlon and Kearns. *Social Science & Medicine*, 128, 338-341.
- 14 Andrews, G.J. (2016a). Geographical thinking in nursing inquiry, part two: performance,
15 possibility, and non-representational theory. *Nursing Philosophy*.
- 16 Andrews, G.J. (2016b). 'Running hot': Placing health in the life and course of the vital city.
17 *Social Science & Medicine*.
- 18 Andrews, G.J. (2018). Health and Place. In T. Brown, G.J. Andrews, S. Cummins, B.
19 Greenhough, D. Lewis, & A. Power (Eds.), *Health geographies : a critical introduction*.
20 Hoboken: Wiley Blackwell.
- 21 Andrews, G.J., Chen, S., & Myers, S. (2014). The 'taking place' of health and wellbeing:
22 Towards non-representational theory. *Social Science & Medicine*, 108, 210-222.
- 23 Andrews, G.J., Kearns, R., Kontos, P., & Wilson, V. (2006). 'Their finest hour': older people,
24 oral histories, and the historical geography of social life. *Social & Cultural Geography*,
25 7, 153-177.
- 26 Andrews, G.J., Milligan, C., Phillips, D.R., & Skinner, M.W. (2009). Geographical gerontology:
27 mapping a disciplinary intersection. *Geography Compass*, 3, 1641-1659.
- 28 Andrews, J.P., & Andrews, G.J. (2003). Life in a secure unit: the rehabilitation of young people
29 through the use of sport. *Social Science & Medicine*, 56, 531-550.
- 30 BBC. (2015). Bristol university's 'puppy room' to combat exam stress.
- 31 Bennett, J. (2010). *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University
32 Press.
- 33 Bonta, M., & Protevi, J. (2004). *Deleuze and Geophilosophy a guide and glossary*. Edinburgh:
34 Edinburgh University Press.
- 35 Buchanan, I. (1997). The problem of the body in Deleuze and Guattari, or, what can a body
36 do? *Body & Society*, 3, 73-91.
- 37 Charles, L. (2011). Animating community supported agriculture in North East England: Striving
38 for a 'caring practice'. *Journal of Rural Studies*, 27, 362-371.
- 39 Clayton, J. (2016). 'Park Rats'; a Temporal Continuum of more-than-human Indifference,
40 Spatial Conflict and Post-Human Futures via Projections from a Present Assemblage.
41 Spaces of Desire; Remembrance and Civic Power. Cardiff.

- 1 Conradson, D. (2003). Spaces of care in the city: the place of a community drop-in centre.
2 *Social & Cultural Geography*, 4, 507-525.
- 3 Conradson, D. (2005). Landscape, care and the relational self: Therapeutic encounters in rural
4 England. *Health & Place*, 11, 337-348.
- 5 Curtis, S. (2004). *Health and inequality: Geographical perspectives*. London: SAGE
6 Publications.
- 7 Curtis, S., Gesler, W., Smith, G., & Washburn, S. (2000). Approaches to sampling and case
8 selection in qualitative research: examples in the geography of health. *Social Science
9 & Medicine*, 50, 1001-1014.
- 10 de Krom, M.P., & Dessein, J. (2013). Multifunctionality and care farming: Contested discourses
11 and practices in Flanders. *NJAS-Wageningen Journal of Life Sciences*, 64, 17-24.
- 12 Del Casino, V.J. (2016). Social geographies II: Robots. *Progress in Human Geography*, 40, 846-
13 855.
- 14 Deleuze, G., & Guattari, F. (2008). *A Thousand Plateaus*. London: Continuum.
- 15 Dewsbury, J.-D. (2003). Witnessing space: 'knowledge without contemplation'. *Environment
16 and Planning A*, 35, 1907-1932.
- 17 Dewsbury, J.D. (2010). Performative, non-representational, and affect-based research: Seven
18 injunctions. In D. DeLyser, S. Herbert, S. Aitken, M. Crang, & L. McDowell (Eds.), *The
19 SAGE Handbook of Qualitative Geography* pp. 321-334). London: SAGE Publications.
- 20 Dowling, R., Lloyd, K., & Suchet-Pearson, S. (2016). Qualitative methods II: 'More-than-
21 human' methodologies and/in praxis. *Progress in Human Geography*.
- 22 Duff, C. (2010). Towards a developmental ethology: Exploring Deleuze's contribution to the
23 study of health and human development. *Health*, 14, 619-634.
- 24 Duff, C. (2011). Networks, resources and agencies: On the character and production of
25 enabling places. *Health & Place*, 17, 149-156.
- 26 Emmerson, P. (2017). Thinking laughter beyond humour: Atmospheric refrains and ethical
27 indeterminacies in spaces of care. *Environment and Planning A*.
- 28 Fletcher, T., & Platt, L. (2016). (Just) a walk with the dog? Animal geographies and negotiating
29 walking spaces. *Social & Cultural Geography*.
- 30 Fox, N.J. (2002). Refracting 'health': Deleuze, Guattari and body-self. *Health*, 6, 347-363.
- 31 Fox, N.J. (2011). The ill-health assemblage: Beyond the body-with-organs. *Health Sociology
32 Review*, 20, 359-371.
- 33 Fox, N.J. (2016). Health sociology from post-structuralism to the new materialisms. *Health*,
34 20, 62-74.
- 35 Gastaldo, D., Andrews, G.J., & Khanlou, N. (2004). Therapeutic landscapes of the mind:
36 theorizing some intersections between health geography, health promotion and
37 immigration studies. *Critical Public Health*, 14, 157-176.
- 38 Goffey, A., & Pettinger, L. (2014). Refrains and assemblages: Exploring market negotiations
39 and green subjectivity with Guattari. *Subjectivity*, 7, 385-410.
- 40 Gorman, R. (2017a). Smelling Therapeutic Landscapes: Embodied Encounters within Spaces
41 of Care Farming. *Health & Place*, 47, 22-28.
- 42 Gorman, R. (2017b). Therapeutic landscapes and non-human animals: the roles and contested
43 positions of animals within care farming assemblages. *Social & Cultural Geography*,
44 18, 315-335.
- 45 Gorman, R., & Cacciatore, J. (2017). Cultivating our Humanity: A Systematic Review of Care
46 Farming & Traumatic Grief. *Health & Place*, 47, 12-21.

- 1 Hanlon, N. (2014). Doing health geography with feeling. *Social Science & Medicine*, 115, 144-
2 146.
- 3 Haraway, D.J. (2008). *When species meet*. Minneapolis: University of Minnesota Press.
- 4 Hassink, J., Elings, M., Zweekhorst, M., van den Nieuwenhuizen, N., & Smit, A. (2010). Care
5 farms in the Netherlands: Attractive empowerment-oriented and strengths-based
6 practices in the community. *Health & Place*, 16, 423-430.
- 7 Hinchliffe, S. (2007). *Geographies of nature: societies, environments, ecologies*. London: SAGE
8 Publications.
- 9 Hine, R., Peacock, J., & Pretty, J.N. (2008). Care Farming in the UK: Contexts, Benefits and Links
10 with Therapeutic Communities. *Therapeutic Communities*, 29, 245-260.
- 11 Holland, S. (2009). Looked after children and the ethic of care. *British Journal of Social Work*,
12 1664-1680.
- 13 Johnston, C. (2008). Beyond the clearing: towards a dwelt animal geography. *Progress in*
14 *Human Geography*, 32, 633-649.
- 15 Kearns, R. (1993). Place and health: towards a reformed medical geography. *The professional*
16 *geographer*, 45, 139-147.
- 17 Kraftl, P. (2014a). 'Alternative' Education Spaces and Local Community Connections: A Case
18 Study of Care Farming in the United Kingdom. In S. Mills, & P. Kraftl (Eds.), *Informal*
19 *education childhood and youth: Geographies, histories, practices* pp. 48-64).
20 Hampshire: Palgrave Macmillan.
- 21 Kraftl, P. (2014b). *Geographies of alternative education: Diverse learning spaces for children*
22 *and young people*. Bristol: Policy Press.
- 23 Latour, B. (2005). *Reassembling the social*. Oxford: Oxford University Press.
- 24 Law, J. (2007). Making a Mess with Method. In W. Outhwaite, & S. Turner (Eds.), *The SAGE*
25 *Handbook of Social Science Methodology* pp. 595-606). London: Sage.
- 26 Laws, G., & Radford, J. (1998). Place, Identity, and Disability. In R. Kearns, & W. Gesler (Eds.),
27 *Putting health into place: Landscape, identity, and well-being* pp. 77-101). New York:
28 Syracuse University Press.
- 29 Lien, M.E. (2015). *Becoming Salmon: Aquaculture and the Domestication of a Fish*. Oakland:
30 University of California Press.
- 31 Lorimer, H. (2010). Forces of Nature, Forms of Life: Calibrating Ethology and Phenomenology.
32 In P. Harrison, & B. Anderson (Eds.), *Taking-Place: Non-Representational Theories and*
33 *Geography: Non-Representational Theories and Geography* pp. 55-78). Farnham:
34 Ashgate.
- 35 Lorimer, J. (2007). Nonhuman charisma. *Environment and Planning D: Society and Space*, 25,
36 911-932.
- 37 Mazzei, L.A. (2013). A voice without organs: interviewing in posthumanist research.
38 *International Journal of Qualitative Studies in Education*, 26, 732-740.
- 39 Milligan, C. (2006). Caring for older people in the 21st century: 'Notes from a small island'.
40 *Health & Place*, 12, 320-331.
- 41 Milligan, C., Atkinson, S., Skinner, M., & Wiles, J. (2007). Geographies of care: A commentary.
42 *New Zealand Geographer*, 63, 135-140.
- 43 Milligan, C., Gatrell, A., & Bingley, A. (2004). 'Cultivating health': therapeutic landscapes and
44 older people in northern England. *Social Science & Medicine*, 58, 1781-1793.
- 45 Milligan, C., Payne, S., Bingley, A., & Cockshott, Z. (2015). Place and wellbeing: shedding light
46 on activity interventions for older men. *Ageing and Society*, 35, 124-149.

- 1 Milligan, C., & Wiles, J. (2010). Landscapes of care. *Progress in Human Geography*, 34, 736-
2 754.
- 3 Mort, M., Milligan, C., Roberts, C., & Moser, I. (2013). *Ageing, Technology and Home Care:
4 New Actors, New Responsibilities*. Paris: Presses des Mines.
- 5 Murdoch, J. (2006). *Post-structuralist Geography: A Guide to Relational Space*. London: SAGE
6 Publications.
- 7 Pacini-Ketchabaw, V., Taylor, A., & Blaise, M. (2016). Decentring the human in multispecies
8 ethnographies. In C. Taylor, & C. Hughes (Eds.), *Posthuman Research Practices in
9 Education* pp. 149-167). New York: Palgrave Macmillan.
- 10 Pets As Therapy. (2016). Join Us With a PAT Dog.
- 11 Plourde, L. (2014). Cat cafés, affective labor, and the healing boom in Japan. *Japanese Studies*,
12 34, 115-133.
- 13 Press, M., & Arnould, E.J. (2011). Legitimizing community supported agriculture through
14 American pastoralist ideology. *Journal of Consumer Culture*, 11, 168-194.
- 15 Serpell, J. (2003). Anthropomorphism and anthropomorphic selection-Beyond the "cute
16 response". *Society & Animals*, 11, 83-100.
- 17 Tsing, A. (2010). Arts of Inclusion, or How to Love a Mushroom. *Manoa*, 22, 191-203.
- 18 Wells, B.L., & Gradwell, S. (2001). Gender and resource management: Community supported
19 agriculture as caring-practice. *Agriculture and Human Values*, 18, 107-119.
- 20 Wolch, J.R. (1990). *The shadow state : government and voluntary sector in transition*. New
21 York: The Foundation Center.
- 22