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Becoming with a police dog: Training technologies for bonding

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To develop and illustrate the potential for visual methodologies in conducting multi-species ethnography, we present a case study of general-purpose police dog training in the UK. Our argument is two-fold: first, we draw on STS approaches and insights for looking at training activities as material and socio-cultural devices that, we argue, constitute a training technology. Here we have been influenced by the work of Cussins and adopted her concept of "ontological choreographies" for addressing the development of the police dog–police officer bond and ability to communicate for working together. Second, we argue that visual data capture presents valuable opportunities for "less human-centred" and more symmetrical methods to approach non-human/more than human research subjects. We illustrate how photo diaries and video clips enabled us to remain attentive to the material and embodied practices of dog training, bringing to the fore the dogs' actions, tools, and devices and thus enlivening the material–cultural choreographies of the training activities. In conclusion, we elucidate how this onto-epistemological approach enabled us to investigate the material and corporeal construction of the general purpose (GP) police dog.

KEYWORDS
animal geography, dog training, human–animal relationship, multispecies ethnography, ontological choreographies, visual methods

1 | INTRODUCTION

This paper focuses on the experience of training for general purpose police dogs (GP dogs) and their human handlers, based on research conducted with a police force in the UK.[1] We are aware that training to become a police dog accounts only for a limited part of a dog's life and that, once dogs start to work with their handlers, a set of questions arise about how their deployment may put members of the public at risk. In fact, there is significant literature pointing to the predatory use of police dogs against African Americans in the USA (Spruill, 2016) and against black people in South Africa as a regular police strategy (Shear, 2008). While in the UK there is no evidence that such issues are so prominent, a BBC report in 2014 indicated that 150 innocent people in the UK were attacked by police dogs between 2011 and 2013.[2] However, the aim of this paper is not to discuss the use of dogs in police work, and we know that the reality of their working lives will always be affected by the dominant policies of those involved. We believe that accounts of practices that involve non-human animals (police dogs as well as other working animals) often tend to efface non-human subjectivities. How non-human animals are enrolled and learn to work with humans in multispecies practices tends to disappear and the roles of animals are often reduced to becoming instruments of human work (a toolkit) whose capabilities and subjectivities are left unexplored. In this paper we want to question this assumption and address this gap: our focus is on the construction of the

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human–dog relationship in working practices, on the dogs' experience of training, and we address the question: How do dog training cultures create a bond between dog and human?

We will argue that through following the choreographies of training, it became apparent how the police officer–dog teams developed particular abilities and ways of being in the world (Despret, 2010; Latour, 2000; Miele, 2016) that, when successful, enabled them to establish a working partnership for the entire career of the police dog. Our paper presents two related contributions to current debates in more-than-human geographies and multispecies research. First, we present a framework arguing that objectification and agency of the dogs can be understood as entwined. Here we appropriate Charis Cussins' concept of ontological choreographies (Cussins, 1996) to explore how objectifications and agencies are enacted during training sessions. We instrumentalise Cussins' work to investigate how canine emotions are constructed and understood by police instructors and handlers. This argument is underpinned by insights from STS to look at training activities as material and socio-cultural devices that, we argue, constitute a training technology.

The second contribution is methodological. We argue that visual methods, specifically photo diaries and video clips, enabled us to undertake a multispecies ethnography attentive to the material and embodied practices of dog training. Visually documenting the vast array of heterogeneous actants and their movements in training practices enabled a decentring of the human subjects of the research and offered a more symmetrical way of attending to how training constructs the police handler–dog partnership.

These two contributions are interconnected in that the photographic and video methods foregrounded the materiality of the training, demonstrating how the dogs' objectifications were specific and contingent, often involving their personal histories, bodies, abilities, and skills. Our STS exploration of objectification stands in contrast to more deterministic explanations of the dogs, for example as being like wolves perceived to operate in a hierarchical pack.

The paper first situates our argument within current debates on multispecies ethnography, and more-than-human geographies, arguing that focusing on the visual aspects of training helps to level the gaze and addresses the challenge of producing more symmetrical research (Buller, 2014). Second, our conceptual and methodological framework elaborates how visual methods align with the conception of the training as a technology, extended through the typology of active objectifications (Cussins, 1996). This second section closes with an introduction to the research practice and research subjects: police dogs, officers, and instructors. The third section consists of two vignettes. The first, "Naturalising the environment," explores the corporeal aspects of the training environment revealed through our visual research, while the second, "Making a good bite," illustrates bite training as a process informed by a specific "objectification" of the dog (i.e., the hunter/the descendent of the wolf that likes to chase and bite) in the making of the GP dog.

The paper concludes by proposing that in moving away from forms of research that privilege the human actors' agency we were able to capture how a certain kind of dog agency emerged in the construction of the police handler–police dog bond and working partnership. With this analysis, we aim to contribute to recent debates in animal geography that attend to material and spatial forms of practices involving non-human animals (see among others, Birke, 2007; Latimer & Miele, 2013; Schuurman & Franklin, 2015) attempting to avoid idealisation or human-centred perspectives.

2 | MULTISPECIES RESEARCH AS (TRAINING) TECHNOLOGIES

There is now emerging literature on multispecies ethnographies that aims to address the experience of non-human animals when they are involved with humans in practices of work, sport, farming, research, or companionship (see e.g., Birke, 2014; Charles and Wolkowitz, 2019; Ginn, 2013; Despret, 2004, 2008, 2013; Haraway, 2008; Lorimer, 2010; Miele, 2016; Srinivasan, 2013; Taylor & Fraser, 2018). However there remains a clear division of labour: the social scientists have an array of tools for exploring human experiences, and the animal scientists (ethologists, animal welfare scientists, animal behaviour experts) have their methods for grasping the experience of the non-human animals (Barua & Sinha, 2019). Further, there remains a paucity of methods for attending specifically to the construction of human–non-human animal relations. Recently there have been calls from animal studies scholars for methods better able to attend to human–animal relationships (Kirksey & Helmreich, 2010; Buller, 2012, 2014; van Dooren et al., 2016) and from within social science, for methods that attend to the animal in research (Birke, 2014; Margulies, 2019). Veissier and Miele (2014), among others, have argued that multispecies research needs multi- or inter-disciplinary approaches involving research teams with experience across both animal sciences, such as animal behaviour, and the social sciences. These hybrid research teams would lead to definitions of different "objects of inquiry" than the ones identified from within single disciplines. In our project, we address this challenge through providing a mixed-methods multidisciplinary approach that addresses the experience of training for both the human (e.g., observation *in situ*, shadowing, walking along, face-to-face interviews) and the non-human participants, in these cases dogs (specifically Qualitative Behaviour Assessment, QBA[3]). We draw on photo diaries

and short videos to enliven "how" relatings are constructed between subjects, both human and non-human, as well as the socio-spatial settings (Birke, 2014; Haraway, 2008; Rose, 2008). While we have aligned certain methods to investigate humans and others to dogs and further others to enliven interspecies relations, these categories are not discrete. Data gathered from each method feed both tangibly and intangibly into the overall mixed-method approach to portray a more symmetrical account of the dog training practices that we studied (Latour, 2005).

We aim to engage and extend recent debates in more-than-human geography that have argued that visual methods offer the potential to overcome the privileging of the human subjects and the limits of "text" for providing an account of more-than-human practices. For example Bear, Wilkinson, and Holloway argue that research in animal studies remains biased towards text, with only a "small body of work that promotes visual methods as a means to destabilise inherent inequalities in more-than-human research" (2017, p. 228; for an exception, see Schuurman & Franklin, 2015). Moreover, Sexton et al. (2017) argue that only by broadening the "text" and embracing other methods that do not rely only on words can we grasp the visceral/bodily engagements of bodies and the socio-materiality of practices. Several authors have argued that visual methods provide a means of capturing the corporeal communication between humans and the more-than-human world (Konecki, 2008; Lorimer, 2010; van Dooren et al., 2016). However, we also regard visual documentation as an opportunity to foreground the tools and devices of training practices (Wagner, 2011, p. 72). Visual documentation helped us to capture data more closely attentive to the practices through which the dogs' "doggish worlds" (Haraway, 2016a, 2016b) were entangled within the overall training technologies.

We conceptualised the dog training practices as technologies, defined "loosely as the constellation of recourses, tools, techniques and strategies necessary to accomplish something" (Wagner, 2011, p. 76). Thinking about training tools and objects as agentile participants of technology draws together the material with the social arrangements, and cultural structures involved (Wagner, 2011, p. 76; Latimer & Birke, 2009). Thus with photos and video clips we foreground the relational ongoing dance between humans and dogs, comprising devices, tools, environments, ontology, and epistemology, in alignment with what Karen Barad refers to as "practices of knowing" that "cannot be fully claimed as human practices" (2008, p. 147). Barad argues that tools and material objects are not merely arbitrary, waiting for human agency to give them meaning but, instead, she proposes a new materialist feminist approach, arguing that relations involve intra-actions between objects.

Barad's (2007) work provided insights for looking at dog training activities in a less "human-centred" way. Her argument that agency is not solely located in the intentionality of humans invites an ontological shift (from regarding the etymology of a thing as a discrete object to the notion of the gathering), introducing the argument that subjecthood is not fixed in a rigid or permanent sense (Blackman & Venn, 2010; Stacey & Suchman, 2012), but, instead, that agency and intentions are mobile, shifting between different actants. The point is emphasised by Latour, who states that "a gait, a tone of voice, a gesture, and even inner feelings are determined by forces outside of us" (1993, p. 137). This is particularly relevant in thinking about how humans train with dogs because of how humans and dogs communicate. Body movements, sounds, and gestures, are more than adjectives to meaningful actions, rather they are essential forms of interspecies communication. As Henry Buller explains: "Through body movement, animals not only express, enact and develop their agency but they communicate that agency to others (to us) just as we do to them, creating new co- assemblages of movement" (2012, p. 146). However, it is not only the humans and dogs who are involved in the construction of the relatings (Birke, 2014; Haraway, 2008) but also the training tools (such as balls, leashes, bite sleeves, agility jumps, scent markers), and the overall atmosphere (made up of other beings, ground material, texture, scent particles, and ambient sounds) involved in these practices, that also play an active role in this construction. While this may be neglected in some "human-centred" accounts of training practices, it was not lost to the direct participants: the police officers discussed at length the qualities of different bite sleeves or toys and leashes, and were aware of the importance of the training atmosphere (i.e., the wind irritates the dogs, the noise of an approaching car or an unusual hat might spook them …), and ensured the dogs train in different locations and settings, including at different times of night and day.

We are not arguing here that every object in the training environment is active in constructing the police dog–handler partnership. Instead, drawing on Latour's idea that the goal of the social sciences is that of ascertaining "how many participants are gathered in a thing to make it exist and to maintain its existence" (2004, p. 245), we aimed to document and decipher who and what is active in the training technology. Here Latour's use of "thing" relates directly to Heidegger's definition of "a gathering" (Conty, 2018, p. 79) to mean an assemblage of active human as well as active non-human participants, involving objects and beings crossing both material and conceptual realms.

Thus far, we have situated our methodological approach in animal geographies and presented the first part of our argument that visual methods offer an opportunity to foreground the materiality of the training technologies. We now move on

to explain how our appropriation of Charis Cussins' ontological choreographies enabled us to develop our novel approach to multispecies ethnography further.

3 | ONTOLOGICAL CHOREOGRAPHIES: DEVELOPING MULTISPECIES ONTOLOGIES

We first introduce Cussins' explanation of ontological choreography, and then we explore how her typology of objectifications provides a useful framework to understand police dog training. We then explain more directly how we understand the objectification and agencies involved in the training. Throughout our field research, instructors and handlers told us time and time again that "the dogs would not do it if they did not want to" and further explained that the dogs, through training, develop a strong bond with the police handlers and "want to do what they are asked to do because of their mums and dads." Understanding how the human participants determined in what ways the dogs wanted to engage in the training led us to draw on Charis Cussins' (1996) description of objectification as a potentially active rather than passive state. While drawing on the overall training technology enabled us to attend to the materiality of the training, conceptualising the training further as practices of ontological choreography provided more room to understand the agencies involved in the construction of the GP police dog.

Charis Cussins (1996) utilised the term "ontological choreography" to explicate the multiple, performative, experiences of patients and doctors at an infertility clinic. She challenged the view that IVF technologies inevitably reduced women patients' "agency" and personhood by limiting them in the role of mother and by objectifying their body as "ill/non-functioning." She argued that the women patients were active in their medical objectification, choosing to become passive patients to receive treatment as a way to assert their subjectivity.

Cussins' (1996, p. 576) focus on women patients was in part to question reductive notions of women's bodies as passive objects, under the control of medical experts whereas, she argued, the women were active: "[a] woman's objectification involves her active participation, and is managed by herself as crucially as it is by the practitioners, procedures and instruments. The trails of activity wrought in the treatment setting are not only incompatible with objectification, but they sometimes *require* periods of objectification"[4] (1996, p. 580, emphasis in the original). Furthermore, she explored how the women patients perform different types of objectifications (1996, p. 580), for example shifting between performing as a passive body available for examination to an engaged yet agreeable patient receiving expert knowledge from doctors (1996, p. 580). Cussins presents a typology of objectifications to explore further the agencies involved in the fertility treatment processes, and the following section will discuss the dog training concerning categories of objectification – naturalisation and operationalisation – which are useful here to unravel how the officers understand canine agency and involvement in their training.

Exploring objectification as a potentially active state provides a theoretical underpinning to extend multispecies methods capable of exploring our canine research subjects and the more-than-human performativities involved in the training technologies. This conceptual frame offers the potential to reveal the complex ways in which either dog or human subject "is dependent on the constant ontological exchange between ourselves and our environments" (Cussins, 1996, p. 578). Thus we did not aim to arrive at static understandings or reductive facts about dog training. Instead, we aimed to investigate how the research subjects engaged fluidly with one another, and their material environments, becoming more than one.

Although the dogs were sometimes objectified and referred to as "pieces of kit" (jokingly), or "athletes" or even "heroes" by the police officers, to point to a real tension as discussed by Sanders (2006), here our intention is not to argue whether the dogs are objectified as either "non-sentient objects" or "valued partner," but, instead, we use the term objectification to investigate how the construction of the police dogs can be understood as a performative and ambiguous process of objectification of the dogs' characters, bodies, abilities, skills etc. that make them suitable to become GP police dogs. We regard these forms of objectification as a set of dynamic, lively processes. Moreover, in the way that Cussins argues that the women patients were active in their objectification (as mothers, as reproductive bodies to reach their desired goal of becoming pregnant), here we question in what ways the dogs were active in their objectifications as GP police dogs. While we argue that the framework of naturalisation can work across different species, we take on board criticism of actor-network theory, for being agnostic and lacking in differentiation between agencies (Holloway, 2007, p. 1045). Our interest in visual documentation elucidates how the training objects may matter to one another, or not, in different perceptual registers.

Naturalisation entails practices where particular actions and ways of being are normalised and, in the case of the clinic, patients become members (social actors) of the clinic culture, which, in turn, benefits the clinic as the patients are then accepting of their treatment and more likely to take care of themselves by following prescribed practices of care. The

training could be regarded as a naturalising process for both the dogs and for the handlers who learnt to organise their activities in ways that worked for the dogs. We were interested in exploring how the dogs' agencies manifested, through their preferences and engagement with the various training objects and practices. The officers were very invested in which kinds of leash (e.g., selecting types of leather or vegan materials, taking into account touch, smell, and body position) and which particular toys and treats their dogs preferred. Moreover, the training schedule was designed around canine concentration spans and was adapted during the sessions according to how the dogs behaved.

Cussins suggests that patient behaviour holds parallels with "the sociological phenomenon of intentional subordination, where one subordinates one's will to the structural power of another person or organisation to achieve some overarching goal" (1996, p. 595). When the dogs engaged with the training, it was articulated to us as being fun for them and something they enjoyed. When they did not engage, the focus moved across to the handler who needed to improve their training skills (i.e., the tone of voice, the gestures, the hugs, pats, and caresses used for praising the dogs) because the dogs had already been assessed for specific personality traits that make them suitable for training. However, the instructors told of dogs who "did not want to do it" and were differently active in their non-engagement with the training. We extend this discussion in the following vignette.

The second form of objectification we borrow from Cussins is the concept of operationalisation, which Cussins' (1996, p. 596) refers to as medical operationalisation where the woman patient is observed and understood during the treatment cycle as multiple body parts: for example, the pelvis, ovaries, and the scanned image. Thinking of dog training as operationalisation allows us to understand how specific behaviours become operationalised. For example, developing the dogs' biting, jumping, and scenting behaviours forms the focus of key training activities in the making of the whole GP dog. To bite was regarded as a natural behaviour that the officers curated into a specific routine enmeshed between other commands and circumstances.[5] As we shall shortly demonstrate, to bite shifts from being regarded by the officers as a fuzzy action ("dirty" as the instructor says) into becoming a perfected action (a "clean bite") for police work.[6]

Utilising the framework of ontological choreographies within a focus on the more-than-human, non-human agencies introduces speculative questions about forms of decisions the dogs may make about their objectification. To consider the agency of the GP dogs as identical to the agency of the women would be a categorical mistake and is not what we are suggesting here. Instead, we look at the dog's agency as expressed through acquired abilities and levels of engagement (or non-engagement) with practices that construct them as police dogs.

4 | VISUAL MULTISPECIES PRACTICES: DOCUMENTING SOCIO-MATERIAL RELATINGS WITH PHOTO DIARIES AND VIDEOS

Although visual methods are increasingly utilised in more-than-human research (e.g., Bear et al., 2017; Ginn, 2013; Lorimer, 2010; Margulies, 2019), geographers have lagged behind in exploring how photographs and video recordings may be utilised beyond descriptive or representational data (Lorimer, 2010; Margulies, 2019; Rose, 2008). We utilised photos and video clips to investigate the materiality (Ernwein, 2020; Rose, 2008) of the training technologies, and to capture how the humans and dogs enacted the ontological choreographic forms of objectifications. While we shadowed the police dog training practices, we made videos and photographic diaries to capture representations of the embodied interplay between bodies and tools, equipment, space, and time (Lorimer, 2010; Rose, 2008). During training, these elements were structured through training routines and repetitions that also became reproduced through our cycles of visual recording. While the cameras could have been experienced as a further form of external gaze objectifying the subjects (Kindon, 2003), we aimed to ameliorate this through a naturalistic approach. This involved making data by following research subjects using minimal camera movements and few direct close-up shots (Cox & Wright, 2012). We regard the data as versions that hold traces of the experience (Cox & Wright, 2012) and that became an additional object in the overall research.

We shot short spurts of video of approximately a minute, mostly using a tripod, including both dog and handler within the frame. This was to conform to the requirements for the QBA but also it enabled us to frame the subjects in a manner that did not privilege either the dog or the human (MacDougall, 2005). As such, this produced a levelling gaze that decentred the human as the normatively central subject. The short video clips also aligned with the rhythm of the dog training because the dogs are given short activities that are then repeated throughout a training session in cycles interspersed with other actions: play and waiting out of the way while other dogs take their turn.

All the sequences of repeated exercises at different sites were photographed with "continuous shooting" to capture the body movements and facial expressions of the police officers, police dogs, and instructors. Nearly 3,000 photos were shot during the visits.

The photo and video diaries provide a chronology of the police dog training sessions and record the strategies and tools used in this practice. And, as Chaplin has argued, photographs "discover things our minds have failed to consciously register" (2004, p. 36). This type of research documentation is especially useful when the actions are repeated over some time and the results change (i.e., the dogs and handlers acquire specific skills).

Diaries are often understood as tools for research participants to document their everyday lives (Chaplin, 2004; Latham, 2004), but here we utilise the term visual diaries to explain how we, as researchers, gathered data throughout the research visits. For example, the photo diaries have proved useful to visually record the changes in the dogs' achievements and performance as well as the changes in the confidence of the handlers from the beginning to the end of the training programme.

5 | POLICE DOG HANDLERS AND GENERAL PURPOSE POLICE DOGS: STAR, BLADE, SKY, AND LUNA[7]

We followed a team comprising four training dyads (one handler and one dog) with an instructor (John) and a trainee instructor (Maurice) for eight full days during the 12 weeks of the training for licensing the GP dog and police officer couples. All were already experienced police officers. All of the police dogs were female; three were German Shepherds and one was a Belgian Shepherd (Malinois).

The dogs were partnered (by the instructor) with the trainee handlers during the course induction and therefore they entered the training together as a novice team. The training (as described in the *NPCC police dogs manual of guidance 2011*, a reference text for all police forces in the UK) aims to teach the handler to communicate with their canine partner, for the human to understand what the dog is communicating to them, and to read the dog's body language. The primary skills that GP dogs must learn during training are: to follow the directions of the handler, to follow/track a scent, to search for hidden humans, to locate items of "property," to indicate when they find humans or "property" (by barking or lying down), to bite and hold a fleeing human, to jump or scramble over and through obstacles, and basic obedience including an emergency recall. Handlers learn how to manage the dog and to ask the dogs to conduct the tasks correctly when required. The training philosophy was "reward based,"[8] therefore, how to praise and reward the dog was a crucial skill that the police officers learn at the start of their training. Weaver (2017), while looking at dog training as "fuzzy feminist science," has argued that "positive reinforcement," i.e., reward-based methods, aim to gain dog's love while obedience training is oriented to obtain dog's respect for the owner/carer. For the instructors, the police dog handlers' success in gaining the dog's love was one of the essential achievements of the training, and it was regarded as a clear sign for a successful working partnership.

5.1 | The police officer handlers (Jake, Bran, Tom, George)

The police handlers frequently described the job of police dog handler in positive terms – joy, fun, rewarding: "the best job in the force." Dog handlers are involved in frontline policing, and dog handling appeals to specific types of human as well as specific types of dog. Officers required motivation beyond the job, as even on days off from police work they have to care for, train, and exercise the dogs. The GP dogs live in police-supplied outdoor kennels at their handler's home. Handlers told us how they took time to insulate the kennels and provide the dogs with favoured types of bedding; for example, one dog preferred a type of grass bed, while another had a wool bed.

The training we observed utilised actions that dogs (the handlers believe) like to do (such as chasing) and aimed to shape them into particular practices for police work. The training was presented to the dogs (and to us the researchers) as a series of games. During the bite and recall training, joint actions (Konecki, 2008) between the dog, handler, leash, target, and sleeve were repeated over and over, with a shared knowledge of each other's body moves and meaning being developed, and in this way trust and the bond was formed (Hearne, 1986/2007; Haraway, 2016a, p. 137). Through the repeating visceral exchange between bodies and the shared objects – balls, leashes, collars, bite sleeves – a sense of shared ownership was enforced, known through combined scent, and even microbes (Haraway, 2016a). This speaks to the earlier argument that tools and material objects are not merely arbitrary (Barad, 2007).

6 | VIGNETTE ONE: NATURALISING THE ENVIRONMENT

In what follows, the images present an opportunity to observe how the dogs express their desire to engage with the training. The vignettes demonstrate how the objectifications of the dogs were entwined with dog agency, incorporating their

likes and dislikes about the activities and how the construction of the bond between handler and dog unfolded. Furthermore, it became apparent how training involves the instrumental development of care. For the dog, care entails engendering obedience and a desire to protect the human partner. For the handler, care is expressed as a desire to be with the dog 24/7, to protect her, and to learn to understand how to communicate with her.

When working with cameras, as researchers we become more visually attuned to the spaces inhabited by the police dogs. We are aware of the dogs' hours in the van as well as observing the lively training action on the field. We hear the dogs and become aware that the handlers gathered watching are also attuned to any sounds coming from their dogs.

Training days started early, and we reached the site at around 8.00 am. The police always had arrived before us and had set up the day's activities. Training took place at the force headquarters, in a large field with agility equipment, and at a range of open semi-rural or industrial locations. The training space was organised with the vehicles grouped together, with the back doors open so that the dogs could see what was going on while waiting their turn, and with everyone standing nearby (see Figure 1). The active dog and handler would be out with the instructor while everyone else observed at a suitable distance. We were asked to stand back to watch from a "safe" distance, ensuring that there would be no distraction for the dogs. When we arrived, we would set up the tripod and cameras, and John, the instructor, would also tell us where to stand. John would often give us an explanatory commentary of what the dogs and handlers were doing. One handler and dog would carry out a principal activity (agility, scenting, heelwork, or biting) under John's directions. After a few attempts at the task, the handler would take the dog back to their van, and at the same time, a different officer would bring their dog out of their van. In week one, neither the police officer handler nor the dogs performed the tasks correctly. This was expected, and the supervisor demonstrated several times the correct moves that the handlers should learn and emphasised how important it is to praise the dogs, with gestures and voice, when they perform a task correctly (see Figure 2).

The handlers would stand with us while not training, most often near to the row of vans, and so we would all watch the participating handler and dog as a group. The dogs knew we were there and, likely, they became familiar with the sounds of our voices and the smells of our bodies from sitting close over the observation days. They also ran directly past us going in and out of the vans to and from active training.

On one occasion, one of the dogs who was about to start a tracking exercise was barking, and the trainer asked one of us to remove their hat. She had not noticed that the dog was responding to her presence, as she was engrossed in setting up the tripod. This brought home the import of the close attention that was being paid by the dogs and also by the

FIGURE 1 Luna inside the police van equipped for transporting the police dogs. [Colour figure can be viewed at wileyonlinelibrary.com]

FIGURE 2 Luna gets praised with hugs, toy, and compliments in high-pitched voice. [Colour figure can be viewed at wileyonlinelibrary.com]

instructor to the overall training environment. The moment when it became apparent that Sky, the dog, did not trust one of our hats demonstrated the enactment of the material objects in the training environment. Karen Barad argues that materialist performativity is a "materialist, naturalist, and posthumanist elaboration – that allows matter its due, as an active participant in the world's becoming, in its ongoing 'intra-activity'" (2008, p. 122). This example evidences one way in which we had become a performative part of the training environment (Evans and Miele, 2019). Furthermore, this equally demonstrated how attuned to the material world the dogs and also police instructor were, and how objects of importance to the dog team were not necessarily apparent to us, the research team.

Figure 1 depicts the dog Luna inside the van, with the leash hung up on the door grill, and a ball. Training tools became more personalised to each dog as training progressed, and we became more aware of their importance. Here the dog is both one part of the overall assemblage and at the same time holding her space with her sense or relationship to the training tools she shares with her handler. Unlike the private outdoor kennels in the officers' homes, the vans are designed to be open to the public gaze; for example, they are equipped with air conditioning, and this is publicised on the doors of the vans. The dogs can spend several hours in their vans when out on duty and need to become naturalised to their mobile kennel spaces. Some equipment is visible on the right-hand side of the image, hung for convenience, while also partially covering the dog's water and food bowls. The dog seems calm and aware that the handler will let her out periodically for exercise and relief.

7 | VIGNETTE 2: MAKING A GOOD BITE

We observed bite training during our second visit to the police, and it was always repeated on subsequent visits.[9] The activities developed as handlers and dogs became more experienced.

The following images (Figures 3–6) depict the training, demonstrating how the dogs learn to chase and bite a running suspect. One instructor or officer takes the role of the suspect and puts on a protective bite sleeve and then takes a position at a distance from the active dog and handler. The routine is varied with the target officer standing close to the active dog–handler dyad (especially in the early stages of training) and progressively standing further away, running as a moving target, or even hiding. Before a dog is unleashed, legally the officer must shout a warning: "Police officer with a dog, stop,

or I will send the dog" repeated twice. The dog learns to recognise this warning and as the officer shouts begins to pull hard on the leash (see Figure 3), eager to go into the chase, even where there is no suspect in sight. After the officer has shouted the warning, the dog is released off the leash. The dog straight away runs fast, often with their ears back, making a direct bee-line to the target. The dogs learnt to bite the sleeve (a padded slip-on protector) and to hold one bite ideally below the elbow rather than make several bites along the body. They were taught to make one good solid bite that can give a stronghold on the target. To teach this, the handler or instructor being bitten twisted and turned their body and arm while the dog gripped on. A second reason for twisting the human body is to protect the dog from becoming hurt while learning how to make a good bite. The dog is taught to only release on command of the handler. The idea is that the dog will cause the least harm while retaining a strong hold on the suspect. Once the handler arrives and the suspect surrenders, the dog is called off the bite and given a reward (in this case, a toy). If the suspect surrenders before being apprehended by raising their arms and stopping running and turning to face the police officer, the dog should not bite but instead stand in front of the suspect and bark to prevent them running off.

The images below were taken halfway through the training course, and the dogs were refining their biting skills. The first image below (Figure 3) capture's Blade straining on her leash, which is held very tautly by her handler. Both dog and human bodies are synchronised while the handler shouts the verbal warning, which becomes a signal to the dog to become ready. The leash is unclipped at the moment the warning is complete. During the warning, the dog's focus and energy were on the bite target rather than demonstrating resistance to the taut leash, which seemed to contain as much as restrain the dog.

Blade shot up to the target and made ready to bite. She aimed for the bite sleeve rather than any other part of the target's body (Figure 4). The sleeve was constructed from padded fabric and leather, designed to protect the handler's hand as well as arm. The police used different sleeves depending on what type of bite they aimed to encourage. A soft sleeve would enable the dog to experience something of the flesh beneath, thus learning how hard to bite, while a stiff sleeve would encourage the dog to make a tougher bite to hold the target. The officer can feel the strength of the bite through the sleeve, which helps them to assess the dog's intention and level of commitment. John, the instructor, would often take the role of the target, receiving the bite to get a feel of how the dog was engaging with the training. Feeling how the bite is may inform the instructor how serious and engaged the dog is in the task.

FIGURE 3 Blade straining on the leash as her handler shouts the warning. [Colour figure can be viewed at wileyonlinelibrary.com]

FIGURE 4 Blade running in to bite her target. [Colour figure can be viewed at wileyonlinelibrary.com]

FIGURE 5 Blade does not get a good bite. [Colour figure can be viewed at wileyonlinelibrary.com]

FIGURE 6 Sky gets a good bite. [Colour figure can be viewed at wileyonlinelibrary.com]

In Figure 5 it is clear that Blade did not manage to get a good bite that time. Her jaws were barely open, and only her front teeth made contact with the sleeve. Sky (Figure 6), on the other hand, did manage to get a deeper hold on the bite sleeve. Here Sky demonstrates how the entire dog's mouth needs to engage with the bite to gain good grip. The trainer swung around, teaching Sky to bite a moving target, he also moved his body down to help Sky deliver her bite. This is a different sleeve from the one used for Blade in the previous figure. This sleeve has a jute cover for added protection, which gives less sensation of flesh to the dog but enables her to develop the strength of her hold.

Lastly, Blade repeats the exercise; she performs a good bite. Her handler praises her with compliments, given in a high-pitched voice, and a toy to play with in exchange for releasing the bite hold on the sleeve. Then she is allowed to carry the sleeve back to the van as a reward (Figure 7).

8 | DISCUSSION

According to the police instructors, the central pillar in the training relationship is forming the bond between the dog and handler, which is built through the joint actions and care often expressed through shared "knowing" and shared objects. The combinations of play and embodied communication enact a form of affective control and, as such, operate performatively on and within the dog and handler corporeal bodies (Blackman et al., 2008). Thus, the construction of the police dog–handler partnership depends on developing embodied circulations of sensory material interactions between voices (praising, commanding, warning, types of barks and growls), sensing and touching bodies (hands, noses, teeth, fur, licks, and bites), material objects (toys, bite sleeves, leashes, ground, and kennel).

The zoom lenses on the cameras enabled us to capture the close-up view of the dog sinking her teeth into the bite sleeve. Without the recording equipment, we would not have witnessed these tactile details because we had to stand back at a "safe" distance from the dogs. The images demonstrate the difference between a good bite and a weak bite lacking purchase and force. Moreover, through looking at the images we were able to experience something of the affective material force of the teeth against the tough woven fabric of the bite sleeve.

As researchers with our own teeth, when we see the image, we can relate to the feeling of biting, and of biting something with purchase. This sensory recognition of the act of biting is experience-based, and is what Robert Mitchell refers to as "intersensory-matching," meaning that an "observed experience is matched against something similar that one has

FIGURE 7 Sky is given the sleeve to be taken back to the car as "trophy" for a good bite. [Colour figure can be viewed at wileyonlinelibrary.com]

experienced via cognitive or sensory processes, and thus identified" (Smith, 2019, p. 138, citing Mitchell, 1997, p. 419). In this case, the image is viewed as a "corporeal image" (MacDougall, 2005) inviting an intersensory-matching experience, which demonstrates one way how visual data can offer sensory information across species.

The type of sleeves used, as well as other equipment, was an ongoing process where the instructor was continually observing and experiencing corporeally how the dogs engaged with various pieces of equipment. The skills involved in training consisted of getting the right tactile experience of a bite sleeve or the right smell of a search object, the right amount of voice pitch, the right feel of a leash, strength of a tug, as well as the spatial and temporal circumstances, distances, and durations, and rhythms between various objects and handlers and dogs. Also, keeping the dogs' interest through changing objects and circumstances was always on the instructors' radar. Much of the training chatter focused on how people and dogs felt about particular tools and devices and shared stories about their learning and experience. As Smailbegovic explains, the affects that arise from the body-to-body encounter, or indeed, from the "textual properties of objects" can "amplify actions" (2015, p. 36).

The dogs are operationalised as guards, attackers, and protectors through the types of bite training that they receive. They are not merely constructed as mechanomorphic biting machines. The operationalisation is constructed through instructor and handler understandings of the dogs as beings whose instincts can become operationalised into police work. The extent to which the dogs participate in this project can only be assumed through their engagement.

The practice of returning the sleeve to the dog suggested a fluidity in the biting activity, where, on the one hand, the human is the organiser and instigator, but after a good bite the dog wins the prey/bite sleeve – though only to return it to the van. This involves "a shift in ordinary distributions of power and knowing positions" (Staunæs & Raffnsøe, 2019, p. 61) creating a different operationalising with the dog elevated by the practice, but also objectified as one who wants to retain the sleeve as prey, or as a dog who wants to own the training objects. We were often told about the dog's instinctively wanting to protect their handlers and yet they were trained to guard suspects, to repeat bark to intimidate and control suspects, as well as to attack on command.

9 | CONCLUSIONS

In this paper we have asked: How does dog training construct the bond between dog and human? To contribute to recent work in animal geography aimed at studying concrete and spatial forms of animal lives (Buller, 2014; Lorimer et al., 2019; Miele, 2011, 2016), we have looked at the agents and agencies of training practices and the ontological choreographies that are instrumental in achieving the working partnership between a police officer and police dog.

We focused on the material aspects and strategies of training activities, and we have attempted to foreground the spaces and tools used by trainers and handlers to engage the dogs in police tasks. Following Latour, we have maintained that the partnership between a general purpose police dog and a police officer is both an achievement of training strategies and tools, and also that the police officer and the police dog are "what is made to act by many others … is not the source of action but the moving target of a vast array of entities swarming toward it" (2005, p. 46). This achievement, however, is not easy to obtain for all the dogs who are trained as police dogs: it requires the dog's acceptance/sustaining of the objectification of the dog as "hunter" for whom "police work" is a sequence of games and it is fun. The visual methods that we have adopted have enlivened the pico-geographies (Cochoy, 2020) of training by capturing the body movements, the improvements in communication between the handlers and the dogs, and the improvement in the performance of the tasks (going from "dirty" to "clean," as the instructor said). The use of photo and video diaries enabled us to decentre the subject of the training practices and to foreground the actions of the dogs: this enabled us to extend the concept of ontological choreography by deciphering how the ties between them were forged with the help of the training tools and routines. We focused on "ties" not as limiting freedom but as fundamental conditions for action. Here again we draw on Latour, who pointed out that the relevant difference is not between freedom and captivity but between types of bonds: "As to emancipation, it does not mean 'freed from bonds' but well-attached" (2005, p. 218).

The objectification of the dog as the "descendent of the wolf/hunter that likes to chase and bite" is an essential part of training. Then a series of games inspired through this objectification are incorporated in the trainings and proposed as "fun" for the dogs (and the handlers). Sustaining the dog's fun is a crucial element for successful training. The objectification of the dog mentioned above might be reinforced by good performance once she starts to work. Dogs not having fun or losing interest in the toys or other rewards will most likely be defined as "not suitable" for becoming police dogs. Alternatively, they might "resist" or "refuse" to do the police work once the training is finished and the actual work starts. Then they are classified as "failed police dogs" and may be rehomed as companion animals, usually after re-training for companionship.

When successful, the effect of training for both dogs and police handlers is the construction of a working relationship that most likely will last for the entire career of the dog (usually police dogs in this force retire when they are seven years old and in most cases they remain with the police officer as companion dogs for the rest of their life). The police officers we observed stated this is "the best job in the force" and to them the dogs they work with have a great life. One of the police officers who did the training had another German Shepherd as companion animal and felt sorry for him, because he was staying at home, laying on the sofa and getting bored while his police dog was always with him, working and being active all day. The perception that working dogs experience a better quality of life, attributed to increased mental stimulation and the fact that they are not left alone, was widely shared among the police officers and instructors. However, this perception was strongly affected by the specific understanding of the dog's nature or, as we have argued, by the process of naturalisation of a set of dog characteristics: the love to chase and bite, the fun in playing games etc. That portrayal omits the limits imposed on significant aspects of dogs' lives, such as social interaction with other dogs, reproduction and care of offspring, and play as non-instrumental activity (Bekoff, 2008). Here we might consider how the officers express explanations of dogs' engagement in trainings in terms of enjoyment and fun, whereas lack of social interaction with other dogs, sexual reproduction, and care for offspring was diminished. As Annemarie Mol (2002) has argued ontologies are inherently political and as such the portrayals of the training events as "fun" and working as police dogs as promising a "better quality of life" are situated accounts which resonate with the ontologics of the dominant structures of those involved. Our argument is not about characterising training practices as benign or coercive. Instead, we have attempted to understand how the bond between the police officer handlers and the police dogs is achieved and how it is sustained. Our analysis aimed to investigate the "normativities" used to define the "working together" that led the police officers to believe that the police dogs live a good life. The crucial aspect of those normativities is that the dog is always active in the construction of the working partnership, and the trainings activate her. Following these insights, we propose a concept of dog agency that resonates with Cussins' idea of women's active subjectification in the infertility clinic to achieve the desired status (pregnancy). In the training practices that we described, the dog is an active participant and her sustained engagement with the training routines and constant improvement of the police work performance might be seen as a form of agency in achieving a desired

status that for the dog might be sharing time and having "fun" with her carer. In light of this we argue that the training is performing more than one role: on the one hand it is aimed at equipping both the police officers and the dogs with specific skills, but it is also a time during which they learn shared understandings of how to work together. It is in the construction of these understandings that the agency of the dog comes to the fore in the form of engagement and preferences. The normativities offered by the police officers speak to the very achievement of the training: a shared understanding of what is fun, how to have fun together, how to trust, how to care for each other.

The relevance of this analysis is in demonstrating that the dogs can be active in their objectification and naturalisation as "the descendent of the wolf/hunter that likes to chase and bite" in training, that in turn leads them to exert a kind of agency in the construction of the working partnership with the police officer. The analysis also induces a reflection of what is not included in these objectifications and naturalisations, such as a concern for their social life, reproduction, play, and other behaviours that do not conform to this representation of the dog as only the "wolf/hunter." Identifying and naming these objectifications and naturalisations might inform ethical questioning as well as further research and considerations about how long police dogs, and all other working animals, should work for and how they should live while they are working.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study will be available from the Leverhulme Trust after the completion of the study in 2021, but there is a period of embargo of three years. Restrictions apply to the availability of these data for ethical considerations.

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ENDNOTES

[1] This account forms part of a broader research project, "Shaping inter-species connectedness: training cultures and the emergence of new forms of human–animal relations (2018–2021)" http://warwick.ac.uk/interspeciesconnectedness

[2] https://www.bbc.co.uk/news/uk-england-25883238

[3] The QBA method was developed by Françoise Wemelsfelder to investigate animal wellbeing through a focus on overall expressivity of animal bodies (Wemelsfelder, 2007).

[4] Cussins borrows the metaphor of trails from Cussins (1992) to provide a "Spatio-temporal but non-rigid metaphor for capturing the cycles of objectification involved in the distribution and redistribution of activity through time and space" (1996, p. 605, n. 25).

[5] Marc Bekoff and John Byers (1998) suggest bites vary in meaning between play bites, warning bites, and actual combat bites (see also Bateson, 1972; Hearne, 1986/2007).

[6] While we could have selected other examples, such as the operationalisation of the dogs' noses, we selected the bite because during this training the dogs are taken to their edge of control and back again.
[7] We have changed the dogs' names.
[8] See Larlham (2010).
[9] We visited the training as a team of four researchers on three occasions for two days at a time. We also made individual observation visits and conducted interviews on non-training days.

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