Making Scents: Multispecies Partnership, Security, and Affect Among Canine Search and Rescue Teams

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MAKING SCENTS:
MULTISPECIES PARTNERSHIP, SECURITY, AND AFFECT
AMONG CANINE SEARCH AND RESCUE TEAMS

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MAKING SCENTS:
MULTISPECIES PARTNERSHIP, SECURITY, AND AFFECT
AMONG CANINE SEARCH AND RESCUE TEAMS

A Dissertation Presented to the Graduate Faculty of the
Dedman College
Southern Methodist University

in
Partial Fulfillment of the Requirements
for the degree of
Doctor of Philosophy

with a
Major in Cultural Anthropology

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May 15, 2021
ACKNOWLEDGMENTS

This work could not have been accomplished without the support and input of numerous individuals and communities. First, I must thank my advisor and dissertation committee chair, Nicolas Sternsdorff-Cisterna for his unwavering support and guidance throughout this process. Without his encouragement, insight, and patient feedback on numerous chapter drafts, this project would never have been completed. I would also like to thank the other members of my committee for their valuable insights. Dr. Caroline Brettell provided instruction and inspiration during coursework and development of the project proposal. Dr. Nia Parson could always be counted on for encouragement as well as insight regarding ethnographic methods. And Dr. Sabine Frühstück gave me invaluable advice about conducting fieldwork.

In addition to my committee members, the other faculty and staff of the Anthropology Department and others at SMU were vital to the completion of my work. Those who have supported me include Professor Keiko Flores of the SMU Japanese language program, Dr. K. Ann Horsburgh of the SMU Molecular Anthropology Laboratory, and the members of the Dedman College Interdisciplinary Institute Research Cluster on Family, Kinship, and Relatedness. Furthermore, Dr. David Slater and the Institute of Comparative Culture at Sophia University generously hosted me during my fieldwork in Japan.

None of this would have been possible without the help of the participants who allowed me to work with them. I am especially grateful to everyone at Disaster Rescue Dog Network in Japan and their partners who welcomed and assisted me in countless ways during my fieldwork. Additionally, I am indebted to all of the other search and rescue teams, including human and
canine personnel, in the United States, Europe, and Asia who participated in this research and allowed me to participate in their activities and events.

The other members of my cohort at SMU have been the most supportive colleagues one could ask for. I am particularly grateful to Sara Mosher, Megan Latoya, and Brenna Raney for their continued inspiration, friendship, and feedback. Additionally, Josh Dorfman and Katie Fox provided especially helpful mentorship and advice early in my studies. I also benefited from participation in several writing groups, including those at the SMU Annette Caldwell Simmons School of Education and Human Development organized by Veronica Mellado de la Cruz, the Indiana University writing group sustained by LaTeeka Gray, NaiYi Hsu and Anne Mahady, and the Association for Feminist Anthropology writing group organized by Annie Wilkinson. This project was also enabled by the support and inspiration provided by the members of the Tokyo Feminist Book Club.

My family and friends have tirelessly supported my work on this project for the last several years, providing encouragement, patience, and motivation in addition to practical assistance. I could not have completed this project without the backing of such a strong support network.

This research was made possible by the generous funding of the National Science Foundation East Asia and Pacific Summer Institutes (EAPSI) Fellowship, the National Security Education Program (NSEP) David L Boren Fellowship, the SMU Dean of Graduate Studies Dissertation Fellowship, and the SMU Anthropology Department’s Mary Moore Free Graduate Summer Research Fund and Robert Kemper Pre-Dissertation Research Award.
Making Scents: Multispecies Partnership, Security, and Affect Among Canine Search and Rescue Teams

Advisor: Professor Nicolas Sternsdorff-Cisterna

Doctor of Philosophy conferred May 15, 2021
Dissertation completed April 26, 2021

This study examines the qualitative experiences of dogs and handlers working on canine search and rescue teams as they strive to develop a successful relationship through working, training, and living together. In order to work effectively, these teams form affective partnerships characterized by mutual advocacy, correspondence, and trust, which highlight the co-constructed nature of more than human worlds and allow members of both species to contest certain framings of their partners in their social worlds. Each chapter will further explore how handlers grapple with contemporary controversies in their field which are often framed as questions of effectiveness and personal choice in regards to the development of a successful dog-handler relationship, but that I will argue are as contentious as they are partly because they are animated by strong affective multispecies bonds and are, at their core, debates about deeper questions and shifting attitudes regarding the responsibilities of humans to their non-human partners and to the global (multispecies) community as a whole. As experts working on the front lines of multispecies cooperation in the face of climate crises, the experiences and insights of canine search and rescue teams suggest implications for public policy and as it pertains to more-than-human engagement with the rest of our shared planet.
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This is dedicated to Snow, valued research assistant, quarantine companion, and friend who consistently shows more affection and devotion than his human deserves.
Chapter 1

INTRODUCTION: THEORY AND METHODS

“You know, she can’t understand you when you talk to her in English. Even though she’s German, she only understands Japanese”. Tanaka-san eyed me skeptically as he replaced the teapot on the campfire stove we were using to make breakfast under the awning of the long-since abandoned middle school building where we would be working later in the day. Tanaka-san’s non-profit organization, a volunteer canine disaster search and rescue team, had recently received permission from the local government in a rural Japanese prefecture to use the building for training purposes, with the not explicitly stated but clearly understood expectation that the presence of the search and rescue dogs – ever popular among children at public relations events and disaster preparedness exercises – might improve the image and desirability of the town whose population had been dwindling for more than two decades. Volunteers from Tanaka-san’s organization would be spending the next several weekends filling the dilapidated building with mounds of junk collected from the bulk garbage collection center to replicate rubble piles that might be left in and around buildings after a flood or earthquake. Then we would construct elaborate wooden boxes, which looked uncomfortably like coffins, to be placed under the rubble with volunteers hiding inside for the search dogs to practice locating. It was important that their training be as realistic as possible so that they would be ready to respond to a real disaster at a moment’s notice if called upon by local first responders in an area affected by a disaster.
Tanaka-san was talking about Ruby, a German Shepherd Dog with a greying muzzle and a sizable notch missing from her left ear who was resting near the camp stove. Ruby had recently retired from working as a search and rescue dog and now lived with Tanaka-san as a full-time pet (愛犬 “aiken”). “Oh…So she was born in Germany?” I wondered, slightly startled and embarrassed to have been called out for telling a dog that she’s pretty in a language she can’t understand, as if that were somehow different than if I had been telling it to her in fluent Japanese, another language that she, for the most part, cannot understand. Ruby cocked an eyebrow at me - or maybe it was at my breakfast roll - when I glanced over at her, but remained otherwise stoic. “No no no”, Tanaka-san waved his hand impatiently, “She was born in Japan. So were her parents. But her grandfather was from Germany. It’s the same as if you married a Japanese man here. Your children wouldn’t know American culture but they would speak Japanese very well.” I took another breakfast roll from the package we were sharing and huddled deeper into my jacket, shivering in the cool morning air, as Tanaka-san went into more detail about Ruby’s lineage. It turns out Ruby came from a long line of working dogs used for search and rescue and was the cousin of another dog on the same team. That dog, in turn, was the mother of two others including Tanaka-san’s newest puppy in training. German shepherds make great search dogs, according to Tanaka-san, because they have an “on-off switch” meaning that when they are working they focus intensely, but when they are not working they can be calm and relaxed, unlike labs who are always looking for something or the Japanese breeds that are [thought to be] lazy and lacking in motivation. And she is female, which makes her easier to

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1 愛犬 “aiken” is a Japanese term for a pet dog which is composed of the kanji characters for “love” and “dog”, as opposed to the loan word ペット “petto” which is also used to refer to pet dogs or 救助犬 “kyuujoken” which refers to working dogs specifically. There were additional terms used by participants to distinguish between different kinds of domestic dogs based on regional dialects, but these were the most common.

2 The Shiba-inu is a popular Japanese breed among pet owners, but was regarded by handlers and trainers in this study as difficult to train. A Japanese working breed known as Kai ken will be discussed briefly in Chapter 4.
train. While Tanaka-san explained the characteristics of good search dogs, suddenly Ruby sat up, alert, and began barking at something. After a moment, she moved directly in front of me and continued barking, with increasing volume and intensity, her muzzle barely a foot away from my face. I glanced nervously at Tanaka-san, assuming he would call his dog away from whatever was upsetting her, and was puzzled to see that he was laughing. “Look at how you’re sitting” he finally said. “You’re crouched over like a victim and you have a treat.” He indicated the breakfast roll in my lap and I realized my mistake. It was cold and I was hunched over on the tiny camp stool that sat a couple of inches off the ground, cocooned in an oversized jacket. Cradling my hot green tea for warmth in one hand and frantically typing field notes on my cellphone with the other while trying to follow the conversation in Tanaka-san’s notoriously heavy Kansai dialect, I probably even looked like I was in distress. I had not noticed that my posture had gradually shifted to resemble the way a mock “victim” would sometimes crouch on the ground with a dog treat and wait to be “found” by one of the search dogs during a training exercise, but Ruby had. She had done her job and was expecting to be paid - retired or not, human error notwithstanding. Guess who got to eat the breakfast roll.

Tanaka-san’s organization is one of more than 40 volunteer-based non-profit organizations that specialize in canine search and rescue (also referred to as K-9 SAR) in Japan. Members of this team are spread across the country and get together regularly to train with their dogs so that they can maintain readiness to be called up by prefectural authorities in case they are needed to help locate victims of natural disasters or other types of missing person incidents. With the exception of a few small teams maintained by governmental entities (such as military and police canine teams, which usually specialize in other functions besides search and rescue such as
detection of narcotics, explosives or hostile subjects\(^3\)) most members of canine search and rescue teams in Japan – as in many other countries - are volunteers.\(^4\) That means they regularly give up their weekends to do things like hiding under rubble and trekking through inhospitable terrain with their dogs to practice their ability to detect human odor in increasingly difficult circumstances so that they can be prepared to respond at a moment’s notice to a real missing person or disaster situation. This is one of many ways in which regular citizens, human and canine, are involved in disaster preparedness efforts which have been described as so ubiquitous as to be an almost invisible part of everyday life for many Japanese even before the devastating tsunami/earthquake/nuclear disaster of 2011 (Sayre 2011).

But, like the natural disasters that often lead to the tragic loss of life that require such services, canine search and rescue efforts do not only concern human citizens. K-9 SAR is, by necessity, a multispecies endeavor because it is a task that neither of the two participants could accomplish on their own: humans cannot smell missing people nor find them nearly as quickly as dogs can, even with the aid of advanced technology; and dogs, for their part, would not know who and what to look for or in what general area it might be located without the direction of a human handler (nor would they be likely to mount a rescue operation in the first place, although emerging research in dog cognition and emotion suggests that pet dogs do engage in prosocial

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\(^3\) There is some overlap in the types of duties performed by search and rescue teams, which will be discussed further in later chapters. There are police and military working dog teams who engage in search and rescue in addition to other duties, and there are volunteer search and rescue teams represented in this study who work with law enforcement to locate suspects or evidence. Some canines are trained in more than one search discipline, and some handlers work for more than one organization. For example, some canine trainers in this study in Japan trained dogs for volunteer search and rescue as well as other types of obedience or competition training and other emergency services agencies. And in the United States, some canine-handler teams worked for volunteer search organizations in addition to local law enforcement agencies, firefighting departments or federal task forces. Some search dogs also had prior or concurrent experience working as therapy dogs, a function for which many search and rescue dogs in this study were credited regardless of their official designation.

\(^4\) This is frequently (but not universally) true of canine SAR teams in other countries, as well.
efforts to help an owner in distress if they know how to do so (Van Bourg et al. 2020). Regardless, the level of teamwork, communication, and hours of dedicated practice required to carry out the task successfully requires a deep commitment to the dog-handler relationship and to the search effort on the part of both parties, suggesting a substantial degree of agency on the part of the canine partners.

As Tanaka-san and Ruby demonstrated, theirs is a relationship based on a clear mutual trust and two-way communication which requires continuous reflection on both animals’ cognitive and communicative abilities, as well as their social relations. Errors are more likely to be attributed to the human partner whose relevant sensory perceptual abilities (some could argue their social intelligence, as well) are vastly inferior to those of the dogs. Several of the dog trainers I spoke to in Tanaka-san’s organization advised because of this difference in ability that inexperienced handlers should avoid working with certain breeds of dogs that are particularly skilled or serious about their work because those dogs will be less forgiving of inevitable handler error and may become frustrated and refuse to work with an incompetent handler. Such errors could include a miscommunication in which a handler gives an incorrect command or signal to the dog (such as my accidental assumption of the posture used by training “victims”), failing to reward desired behavior at the right time, or other misunderstanding. And, of course, in a real search for missing persons or buried disaster victims, a miscommunication between search dog and handler could be disastrous.

This study examines how this dog-handler relationship, consistent with Haraway’s description of a relationship between “companion species” (Haraway 2003), is articulated in public safety and law-enforcement-adjacent settings influenced by transnational networks of interspecies sociality. I will argue that the inclusion of domestic dogs, who constitute half of this
dog-handler partnership, in neoliberal state security functions - with all their own abilities and differences as well as the messy categorizations and anthropomorphisms that humans bring into them - allows for the re-examination and expansion of opportunities to operate more ethically in relationships between humans and other animals. Some such opportunities will be examined in the form of increasing inclusion of human and canine females in public safety professions (Chapter 3), the recognition that cooperation across species boundaries produces opportunities for cooperation across and interrogation of racial/ethnic/nationalist ones (Chapter Four), and the examination of formal and informal legal, social, and familial statuses that are as fuzzy as the canine partners with whom we sometimes enter into those relations with (Chapter Two and Five). This study follows the lead of other multispecies ethnographies in illustrating how the concept of a social world comprised of the doings of one “species” as a singular object of study fails to consider the rich multispecies context in which any of us actually live. This multispecies approach recognizes the negotiability of human/non-human animal boundaries and examines how the entanglements between canine and human search partners reflect and co-produce the relations of citizens to the state and in transnational networks of relationships that make these endeavors possible.

**Literature Review**

This study is situated at the intersection of the anthropology of the state and the anthropology of human/animal interactions and will build on the contemporary works of scholars who examine the points of problematic engagement between the state and an increasingly demographically complex social milieu, specifically through the medium of domestic working dogs. The research questions will be addressed in some chapters using intersectional feminist and queer theoretical orientations because the majority of participants in this study - and indeed the
majority of participants in K-9 search and rescue at most of the organizations I encountered—were female (a demographic not typically dominant in public safety settings), and because these orientations are already well established in analyzing social dynamics that are characterized by unequal distributions of power and representation (Parson 2016), such as multi-species studies.

**Human/Non-Human Animal Interaction**

The ontological turn in anthropology of the early 21st century has drawn attention to the theoretical and methodological importance of taking seriously the reality described by research subjects and rethinking conceptualizations about them that have been based in Western dualisms such as nature/culture. Researchers have begun to examine the human social world in terms of our entanglements with other kinds of (non-human) living selves (Kohn 2007) through multi-species ethnography (Descola 2013; Kohn 2013; Tsing 2015; Haraway 2008). As described by Kirksey and Helmreich (2010), the multispecies approach to ethnography recognizes a blurring of lines separating the categories of “nature” and “culture” and re-contextualizes the human as existing in relation to other life forms. This approach asks ethnographers to re-engage with the study of organisms – including non-human animals, plants, insects, fungi, and microbes - whose lives and deaths are linked in various ways to human social worlds. This turn has produced consideration of the often-unacknowledged roles (biological as well as social, cultural, political and economic) played by animals in human societies, demonstrating that humans are one of many species whose lives are inextricably linked and mutually dependent (Hurn 2012, Ingold 2000).

The inclusion of non-human actors in anthropological research is not a new phenomenon, although it has been theorized differently over time. For example, Evans-Pritchard’s seminal study of the Nuer foregrounds the importance of the cattle complex in understanding social
structure (Evans-Pritchard 1940). Additionally, primatologists, sociologists, ethologists and zoologists have long used methods akin to participant observation to infiltrate and become accepted/tolerated by nonhuman communities, usually leaning more heavily on the observation portion of the methodology (Hurn, 2012; Hansen 2013). More recently, this approach has been applied to ethnographic studies that incorporate a multispecies framework in which the human experience is not considered in isolation from other species but in relationship with them. This theoretical lens has created space for ethnographic research demonstrating the social, economic, and political importance of multispecies interactions.

For instance, Kohn's ethnographic work with the Amazonian Runa illustrates a tradition of relating to the environment by recognizing the subjectivity of and taking on the perspective of non-human "persons" in the forest as they engage with domestic and non-domestic animals, demonstrating that an anthropology of human life cannot ignore trans-species relationships. He argues that the turn toward multi-species ethnography is not a call for sociobiological reductionism, but is intended to expand the scope of ethnography in that focusing on human-animal interactions allows us to see how people are connected to a broader world of life (Kohn 2007). Ingold further theorizes the human as existing in a continually unfolding field of relationships in a world comprising human and non-human inhabitants. Thus, understanding human social relations requires attention to non-human beings. Ingold further notes that this is necessarily an interdisciplinary pursuit, as creating rigid distinctions between “biological” and “cultural”, which separate species, is part of the reason that previous ethnographic work has failed to properly consider the contributions of non-humans in human social relations (Ingold 2000).
Accordingly, contemporary ethnographic research in Japan in particular has revealed an increasing awareness of the importance of non-human actors in social life. My research is informed by recent studies of robotics as replacements for human labor and the preferential granting of civil rights to non-humans rather than foreign-born immigrants (Robertson 2018); affective labor performed by domestic animals and regulation of their working conditions in animal cafes (Robinson 2019); and on the state's use of cute/feminine/animal imagery to soften and legitimize security functions (Frühstück 2017, Skabelund 2011). Furthermore, Amanda Robinson’s study of “cat cafes” in Japan describes an “affect economy,” in which the human-animal relationship in Japan is commodified and marketized in response to social alienation and economic change (Robinson 2019). Similarly, Hansen notes that while human researchers are limited to the experience of being human (rather than some other animal), this perspective does not preclude the possibility of developing affective bonds with non-human animals. (Hansen 2013). Indeed, Hansen, drawing on Haraway and Derrida, argues that pets - especially dogs - in Japan act as specific and significant others, suggesting that the embodied and affective experiences shared between human and canine others have largely been neglected in ethnographic studies. His study of "fuzzy families" theorizes a post-familial shift in Japan in which a trans-species fictive kinship between human and canine is accomplished through a relationship of dependence, embodied contact, and affect (Hansen 2013).

The concept of domestic animals as human family members (i.e. multispecies families) and members of multispecies teams has been recently explored in other disciplines and cultural contexts, as well. Laurent-Simpson expands the domain of non-human social actors within a symbolic interactionist framework by positing that domestic pets come to occupy positions that allow for the formation of a parent role identity among human participants in childless homes in
the United States (Laurent-Simpson 2017). Furthermore, Hunt et al.’s study of SAR dogs and handlers who worked in the aftermath of the 9/11 disaster in the United States note that the presence of companion animals has been shown to potentially buffer their human counterparts from negative effects of stress and argue that it is the close relationship between SAR handlers and dogs that may confer some protection against stress, depression and PTSD symptoms common among other first responders (Hunt 2012). When applied to questions of state-society relations, this research trend suggests a need for a more expansive framework that does not privilege the human actor to the exclusion of non-human participants.

**Security and the State**

The impact of non-human actors on human social lives in regard to state-society relations is well-established in political and legal anthropological literature. Ethnographic research on the political effects of infrastructural systems suggests that politics emerge from relationships not just between people, but between people and other things—be it bureaucratic paperwork, water pumps, or the rights and privileges of protected species (Perez 2016; Anand 2011; Govindrajan 2018). These other beings and their interaction with people may become instruments of power and generators of various political and citizenship claims. Therefore, non-human others must be brought into the frame of analysis if the relationship is to be understood.

This framework, in which the human is de-centered, is applicable not just to studies of infrastructure and development/conservation projects, but in other studies of the state involving the management of the natural world, such as disaster preparedness and security. In particular, the role of non-human animals in the provision of security by the neoliberal state—both in terms of ecological protection as well as the promotion of general public health and safety—should not be understated. For instance, Hathaway has illustrated the importance of “charismatic mega-
fauna” (such as elephants or jaguars) to rally support for international environmental efforts and affect conservation movements (Hathaway 2013; Wilcox 2018). And recent research in China has identified domestic animal welfare as a site in which citizens successfully resisted or shaped state policy (Barber, 2015). Similarly, in security studies, Kosek’s discussion of the honeybee as it is remade into a military technology and utilized as “zoosensor” in the search for what is beyond the reach of human senses (Kosek 2010), and Lowe’s tracing of the complex multispecies relationships involved in reactions to H5N1 outbreak in Indonesia, in which the “multispecies cloud” of H5N1 is conceptualized as one in which several beings, species, and political and scientific institutions come together and are transformed in unpredictable ways (Lowe 2010), demonstrate the effect of multi-species interactions at the national/international level.

As such, this study is situated in the theoretical literature on the perception of and response to risk. Of particular relevance are Beck’s conception of risk as a category that is socially constructed (Beck 1992) and Giddens’ ontological security (Giddens 1990), as they demonstrate the role of state action to reduce anxiety by creating a perception of security within a social environment (Loader & Walker, 2006; Douglas and Wildavsky 1982; Waever 1995). Goldstein describes the current “Security moment” as characterized by increased surveillance, expansive government powers, interventions, and restrictions on personal freedoms (Goldstein 2010). In this context, Joseph Masco discusses the United States security apparatus in The Theater of Operations (2017). Masco identifies the current U.S. obsession with counterterror as an effort to secure life on a planetary scale. Drawing on Foucault’s concept of biopower, Masco discusses the link between Foucauldian state projects to prevent disease and police the population to the United States’ unique post-cold war security policy that assumes global
domination and a definition of security that includes deterring totalizing global threats (now including terrorism in addition to nuclear war). In this framework, Masco argues that the security state is constantly at work to stimulate terror and the widespread belief that global threats are imminent while developing an infrastructure to pre-empt them which ultimately makes the dangers more real (Masco 2017).

Goldstein also explores the growth of a security framework that organizes contemporary social life around perpetual alertness and preparedness against the emergence of any and all possible threats. But, unlike Masco, he does not see this new “security moment” as a response to the 9/11 terrorist attacks – and thus unique to the United States – but as characteristic of the neoliberal state. He identifies security as a tool of state formation and governmentality that emerges in the cracks and failings of neoliberalism and uses the power of fear to close those gaps. Also emphasized within this framework is the privatization of security, operating under the neoliberal logic that urges self-help and responsibilization of citizens in maintaining their own welfare in the context of state retreat (Goldstein 2010). This study will explore the utilization of affective bonds between human citizens and their canine partners in public service professions to promote and maintain this state of affairs.

In Japan, disaster preparedness has become a common buzzword, and the state has developed and revised extensive protocols for disaster response and public security. As recent disasters such as the 1995 Kobe Earthquake and the 2011 Great East Japan Earthquake and nuclear power plant meltdown have illustrated, Japan is an extremely hazard-prone country and is expected to experience additional major earthquakes, possibly centered in Tokyo, in the near future (Siembieda & Hayashi 2015). Miller et al. (2013) argue that Japan’s national and local responses to these circumstances not only have global implications in the age of the
Anthropocene, but also demand greater attention be paid to environmental concerns – and their deep effects on historical, political and social realities - in humanistic and social scientific research. Given the potential severity of future disasters and the shrinking national economy and aging demographic trends that are projected to continue into the foreseeable future, some researchers have noted the need for more flexible, locally derived solutions to these threats (Siembieda & Hayashi 2015), while others have noted the marked expansion of Japanese civil society – including political activists and citizen scientists – in the aftermath of the 3.11 disaster (Aldrich 2013). Sayre’s research along these lines in the architectural features of Tokyo’s disaster preparedness infrastructure argues that disaster preparedness policy in Japan is less about cultivating a public consciousness of disaster as an event that is out of the ordinary, but rather as composed of assemblages of concealment and technologies of disguise, which conceal disaster preparedness in daily life of urban community residents (Sayre, 2011). Similarly, the expansion of Search and Rescue (SAR) programs may represent another such approach to community-based disaster preparedness efforts that has the potential to produce new insights in the study of contemporary social issues related to the production and maintenance of security by the state in the context of demographic and environmental change and new forms of sociality in the information age.

The importance of domestic canines to human social and political life, broadly speaking, is well-established throughout the ethnographic record (Kirksey & Helmreich 2010; Hurn 2012; Ogden et al. 2013; Stahl 2016; Anderson 2017). While the philosophical question of the “personhood” of non-human animals can be considered somewhat foreign to Western ontology, it is significant in many other cultural contexts (Ingold; 2000; Kohn 2013) and certainly bears further examination in the context of an ecologically damaged world in which humans and non-
human others remain intimately entangled (Weston 2017). Building on this body of scholarship, as well as Goldstein’s (2010) concern with the privatization of security within the neoliberal logic that urges self-help and responsibilization of citizens in maintaining their own welfare, my research examines the role of the Search and Rescue (SAR) dog in shaping the construction of security and risk management as well as altering what it means to be a good citizen/public servant as both dog and handler are drawn into voluntary participation in the security apparatus. Drawing on the concept of “participatory citizenship” (Brettell & Reed-Danahay 2011), I examine contact zones (Haraway 2008) between human and non-human animal participants in the state security apparatus that are generative of shifting understandings of citizenship and personhood.

Questions of the power of the state and its relationship to those considered to be on the boundaries of the category of “citizen” have long animated theoretical discussions of citizenship. For Agamben (1998, 2005) and Arendt (1951), the origins and limits of state power and of the rights of subjects are negotiated at this boundary, with the blurring of the distinction between “bare life” and “good life” and the creation of states of exception allowing for the exercise of sovereign power. This framework has been applied to the analysis of humanitarian interference in which the defense of the rights of ‘victims’ denied protections ordinarily provided to citizens serve to legitimize international invasions by other states (Rancière, 2004). Similarly it has been shown to enable the abuse of those who find themselves stripped of their citizenship in the juridical sense as part of the “war on terror” (Caton & Zacka 2010). Conversely, Ong’s concept of “flexible citizenship” argues that certain transnational citizens may be able to attain extra rights and privileges by gaining the benefits of citizenship in multiple nation-states simultaneously (Ong 1999). Finally, the vast body of migration literature has elucidated the
myriad ways in which citizenship and accompanying civic activities may be experienced and produced as a cultural and social process rather than a legal status or set of rights (Brettell & Hollifield 2015). Within this framework, concepts such as “cultural citizenship” and “participatory citizenship” entail actions by newcomers combined with local, national, and transnational processes to produce and transfigure citizenship at the sites of interaction between the newcomers and the social body (Ong et al. 1996; Brettell and Reed-Danahay 2011; Brettell and Hollifield 2015). This study builds upon an emerging body of literature conceiving of domestic dogs as ‘citizens’ or surrogate family members socially, if not legally, (Shir-Vertesh 2012; Hearne, 2016; Laurendt-Simpson 2017) to better understand their contribution to civic engagement as enacted by individual citizens as well as state policy.

This vein of research is not merely theoretically important; it has implications for public policy. For instance, Irvine’s study of homelessness and pet ownership in the U.S. demonstrates that pet dogs serve as surrogate family members or friends for homeless people who rely on the relationship to survive and, in some cases, achieve redemption. This study is significant because it also has implications for affordable housing policies in the U.S. that prohibit pets (Irvine 2013). This echoes the work of Kajiwara who found that, in the case of Japan’s 3.11 disaster, the bond between human and domestic pet had real consequences for post-disaster recovery in that people’s unwillingness to abandon their pets or their bereavement after being forced to do so impacted their ability to obtain temporary housing and recover from the disaster, suggesting that this relationship must be taken into account in government policy if more effective post-disaster protocols are to be developed (Kajiwara 2016). This shift toward including household pets, in addition to human citizens, in disaster preparedness legislation also became apparent in the U.S. in the aftermath of the Hurricane Katrina with the passage of new legislation such as the Pets
Evacuation and Transportation Standards Act of 2006, which requires state and local emergency preparedness operations to address the needs of household pets - rather than only human victims, as was the case in previous protocols- in the provision of emergency rescue, transportation, and shelter (“HR 3858”, 2006).

Additionally, the human-animal relationship has been shown to impact international and global processes. Parreñas’ (2012) study of transnational volunteerism in Malaysian orangutan rehabilitation centers argued that the custodial labor involved in caring for orangutans generates affect through multispecies encounters (between human and orangutan) and is structured by postcolonial inequalities and produces a global economy of affect through a dynamic, multispecies interface. That a multispecies relationship could be important to the production of global and transnational processes is significant to this project given that state policy in Japan limits the ability of foreign SAR teams from entering Japan while simultaneously encouraging the expansion of Japanese SAR teams’ capabilities to deploy internationally (personal communication - Japan Foundation, 2018). This is consistent with the findings of Watanabe (2013), whose analysis of volunteers in Japanese NGO's working on international development projects revealed competing conceptions of “Japaneseness” as it fits into modernity, and Leheny (2003), whose study of the involvement of the Japanese government in individual leisure activities and preferences shows the political importance of these apparently personal activities to efforts by governments to be recognized as belonging with other industrialized nations. Similarly in the United States, Adelman (2019) analyzes the manipulation of affect regarding military working dogs to reinforce nationalist sentiments and stereotypes and to maintain citizens’ tolerance of perpetual securitization and warfighting efforts at home and abroad.
**Research Objective**

My project expands on these concepts by utilizing a multi-species ethnographic approach to the study of the state and its cooperative engagement with citizens in efforts to address security and or engage in some form of civic participation. This approach suggests attending to the everyday engagements between humans and other animals who engage collectively in “world making”, rather than privileging the perspective of only the human participants (Haraway 2016; Kohn 2013). Expanding on the work of Laurent-Simpson (2017) and Hansen (2013), I ask what social role do dogs play in the work of multispecies teams in community and national/international level disaster response? This study approaches SAR participation as one type of civic engagement in which multispecies participation is key, providing an alternative perspective on the concepts of citizenship/personhood and the rights and duties of those involved. Mapping the shifting relationship between humans and non-human animals in the context of a shrinking population and tight controls on immigration, I investigate the blurring of lines between humans, animals, and technology, and the ways in which these roles are transformed as dogs stand in for other types of social connections and become mediators of sociality, care, and security.

**Methodology**

I conducted research for this ethnography between 2016 and 2020, including preliminary trips to potential field sites and development of research contacts and permissions. In total, I conducted 51 in-depth interviews with search and rescue personnel (including canine handlers, trainers, support personnel, administrators and government officials), in addition to numerous informal conversations and hundreds of hours of participant observation, including observations of and interactions with canine team members. My primary fieldwork took place in Japan over
16 months in 2018-2019 and in the United States and Europe for a similar period of time in 2019-2020 (although much of that portion of “fieldwork” took place virtually as a consequence of the global COVID-19 pandemic). My primary physical research sites were K-9 search and rescue training and public events, as well as mock searches for training and testing purposes and, occasionally, actual searches for missing persons. The actual location of these field sites varied as dictated by the training objectives and out of operational necessity.

In Japan, I joined a non-profit disaster Search and Rescue team which had members located throughout the country and maintained formal contracts with public safety authorities (usually the Fire Department) in several prefectures and could be activated in response to requests from those agencies in the case of disaster or other missing person incidents. I conducted participant observation and recruited members for in-depth interviews from this team (which will be referred to by the initials DRDN) and was allowed to participate in many of the team’s activities, including regular team trainings which occurred at least monthly (but usually more frequently) and usually lasted 2-3 days at a time, locating and building training sites, meetings with government officials and fire department personnel, public relations and fundraising events, board meetings, training seminars and retreats, and public demonstrations at National Disaster Preparedness Day events. My role in these events was primarily as an observer, as well as some other minor functions such as photographing events for the team’s website and social media accounts, assisting with training by acting as a mock “victim” for the search dogs to find, set up and construction of training sites, and occasionally acting as back-up interpreter for events with members of a European team with which the Japanese team maintains association. The interpretation function also provided an opportunity to travel with members of the Japanese team to two (undisclosed) locations in Europe to observe training and mission-
readiness testing of European dog-handler teams consisting of military and civilian personnel. I received permission to make observations and conduct in-depth interviews and informal conversations at these locations, as well.

During this time, I was based primarily in Tokyo, but frequently traveled with team members who generously agreed to make space for me in their vehicles, which are usually full of dogs and related equipment to their various events. During these events, I recorded observations, collected photographs, and conducted informal conversations and in-depth interviews with participants in attendance, which included K-9 handlers, trainers, and other volunteers who filled support and administrative roles (many of the volunteers occupied several of these roles, simultaneously). I also conducted interviews and informal conversations with first responders and other government officials involved in some way with Search and Rescue activities as well as members of the general public who attended events.

The fieldwork for this ethnography was originally intended to take place entirely in Japan. However, during the course of my fieldwork, it became clear that the research questions could be better addressed from a multi-sited perspective for two reasons. First, the operation of a K-9 search and rescue team is not an activity that takes place in a single field site, either conceptually or physically. It is a transnational team-based event that relies on the cooperation of not just multiples species of teammates but also multiple levels of government and civil society to coordinate groups of volunteers and first-responders operating under a disaster response framework within various locations across the nation and, at times, in cooperation with international teams. It is a project characterized by networks of members (the team that I volunteered with actually called itself a “network”, with that part of the title written in the Japanese script reserved for foreign loan words – ネットワーク), who collectively operate
within an international milieu of training practices, certification standards, and specialized knowledge related to search dog training and operations transmitted across borders through collaboration with domestic and international partner organizations and trainers who participate in joint training exercises as well as in online spaces. As the training sites -and disaster sites - could not be pinned down to a specific physical location during the course of my fieldwork, similarly the knowledge practices utilized by search and rescue teams were multiple and dynamic, the products of global flows (Inda & Rosaldo 2013; Zhan 2009).

Following Marcus’ promotion of the usefulness of a multi-sited approach as a methodological solution for ethnographers tracking complex objects of study that require multiple sites of observation and participation beyond a simplified conception of a “local” or “global” site (Marcus 1995), an approach that has been productively applied in multispecies ethnographic work (Kirksey and Helmreich 2010, Kosek 2010, Tsing 2015), I determined that this study could not be effectively researched by confining my observations to a single location. Not that this would have been possible anyway, given that participant observation – or indeed communication of any kind - with the K-9 team to which I was connected required digital communication with members residing in different cities and continuous movement across prefectural – and, occasionally, national – borders.

It is fortunate that this research was theoretically suited to a multi-sited approach, because the second reason for choosing that approach grew out of necessity. This study is mainly concerned with the relationship between humans and domestic dogs, but acknowledges the existence of myriad other multispecies entanglements that each are involved in on a daily basis – from relationships with other domestic animals, interactions with plant and animal life encountered in the work setting, and bacterial contributions to gut health and production of odor–
which have been largely omitted for practical reasons since the dog-handler relationship is the primary focus of my research questions. However, there was one additional entity that refused to be left out of the research process: the SARS CoV-2 virus (COVID-19), which became a global pandemic during the course of my fieldwork. This development made travel and face-to-face contact with research participants in the traditional sense all but impossible. I will leave aside questions of agency and indeed status as a “species” regarding the COVID-19 virus for now and suffice it to say that as a result of its involvement, substantial alterations were made to my original research design.

During the remainder of my fieldwork in 2020, my interaction with participants took place largely in virtual spaces. After returning to the United States, I continued following the flow of knowledge and practices related to K-9 search and rescue teams by collecting additional observational data and interview with participants in the United States and Europe in order to gain cross-cultural perspective. Although I had joined, and maintain membership in, a volunteer-based K-9 search and rescue team in the United States, formal training and participant observation was not possible during much of the COVID-19 pandemic. Nevertheless, my research has been informed by knowledge and insights gained through my continuing personal involvement with K-9 search and rescue organizations, as well as informal conversations with other volunteers and the completion of training courses in search operations and canine handling. My former professional experience working in public safety prior to this research has also informed my analysis to some extent. Additionally, despite the pandemic, I was able to continue conducting interviews, conversations, and a few follow-up interviews with K-9 search and rescue participants in the United States, Europe, and Japan using emailed questionnaires, messaging apps, and telephone and Zoom video services as alternative interview approaches (Burns 2010,
Janghorban et al. 2014). I am grateful for the resources and advice made available by other anthropologists working through similar issues sharing their real-time adaptations and ideas on the crowd-sourced google-document “Doing fieldwork in a pandemic” (Lupton 2020).

This improvised approach to fieldwork after the onset of the COVID-19 pandemic resulted in a somewhat less systematic approach to data collection and sampling for that portion of the project. In Japan I had been able to actively participate in the regular operations of a single SAR team, which allowed me to meet regularly with and develop rapport with all of the active team members who I could request to collect observational and interview data from. “Virtual” fieldwork did not work in quite the same way, and I was forced to turn primarily to snowball sampling (Bernard 2017), relying on participants in virtual interviews to refer me to other members of their team or connect me with their virtual networks of SAR volunteers on other teams. One unexpected benefit to this method was that it put me in contact with a larger number of participants in a shorter period of time and allowed me to interview people throughout the United States and in several European countries who I would never have otherwise had the opportunity to come into contact with. Additionally, by communicating through email I was able to collect additional data from some Japanese participants who lived in more remote geographical locations and had not been available for in-person interviewing.

During this time, the majority of my communication with research participants and others in the K-9 SAR world occurred through virtual social networks such as Instagram and Facebook groups. These networks turned out to be key to my ability to continue to recruit participants during a time of quarantines and lockdowns, as they are also vital to the continued training and operation of SAR teams. Furthermore, the webs of virtual association relied upon by so many during a time of social upheaval caused by the COVID pandemic reinforced my decision to
consider this project a multi-sited one: SAR teams do not develop and exist in a hermetically sealed physical or social space any more than human social worlds - or research projects - could claim to be unaffected by interactions with other species. In analyzing the data collecting throughout this project, I attempt to keep these methodological constraints in mind and contextualize the data as necessary wherever they are presented, but it should be noted that this study is not intended to be a side-by-side comparison of “Western” versus “East Asian” canine search and rescue practices, as if any such thing existed, but rather a multi-sited analysis of a transnational phenomenon at various scales.

Notes on Analysis of Multi-sited Data and Avoidance of Methodological Nationalism

Although this study is multi-sited and, as a result, contains ethnographic detail from multiple socio-cultural, linguistic, and legal contexts, I will not be treating the data from each field site as strictly separate. In other words, ethnographic data from search and rescue participants will not be presented separately as “Japanese” data as compared to “European” or “North American” data. Canine search and rescue is a transnational phenomenon and therefore clear boundaries between what is “American” or “Western” or “Asian” are not necessarily clear nor useful. Indeed, multiple participants (human and non-human) moved through and between the various field sites and could at various points be counted as members of more than one group. For instance, one dog-handler team consisted of a dog that was born and raised in the US, a handler that was born in Japan (with other members of the household variously born in Japan and the US), and who trained under the guidance of Swiss trainers. At various points during the course of my fieldwork, this dog-handler team lived in and operated on SAR teams in both the US and Japan. To identify data generated by this team as either Japanese or Western would be to create a distinction without meaningful application to this study. It would further arbitrarily
privilege the national origin of one half of the dog-handler dyad and make an unjustifiable assumption about the meaningfulness of human national boundaries to the identity and behavior of both humans and dogs.

This is not meant to elide meaningful difference (of which there is plenty and which will be discussed when relevant), but it is meant to reframe the focus of the analysis on the dog-handler dyad by paying attention to the intersections of identity and difference as they affect the multispecies relationship. In the same way that a commodity study focuses on the commodity as it flows through various contexts, this ethnographic account focuses on the spaces of encounter that include the dog-human dyad in some fashion.

**Data Collection and Analysis**

This project incorporates multiple qualitative research methods, ethnographic fieldwork and techniques of the digital humanities. Research methods include participant observation, semi-structured interviews, collection and content analysis of archival government documents and media sources, and thematic and statistical analyses of social media data gathered from online communities including civil society and public safety agencies.

The multi-species approach to this project suggests attending to the everyday engagements between humans and other animals who engage collectively in “world making”, rather than privileging the perspective of only the human participants (Haraway 2016; Kohn 2013). Methodologically, this means that I elected to tailor accepted social science methods to include observations and interactions that attend to both human and non-human behaviors and perspectives in order to better understand and represent the human-animal relationship dynamic (Hurn 2012; Ingold 2000). Following Haraway’s assertion that, for companion species such as humans and canines, the relation is the smallest possible unit of analysis (Harway 2003), I take...
as my primary unit of analysis the dog-human dyad of the canine search and rescue team consisting of one human handler and one canine who are trained to operate together (referred to hereafter as a SAR team or K9 SAR team), while recognizing that this dyad operates within and among other such dyads as well as numerous support personnel and varying social/legal structures that shape and constrain the operations of each member. In other words, this study is not a description of people who train dogs but rather one of people and dogs who train together. As such, the focus of my observations and interviews with SAR teams tend to focus on relational aspects of the activities taking place.

Selecting Pseudonyms and Establishing Consent for Human and Non-Human Participants

Because this ethnography is multi-sited and multi-species, recruiting participants in each setting necessitated having a discussion about those participants’ concerns about privacy and anonymity, which varied in different contexts. Some groups expressed no desire to remain anonymous, wishing instead for greater public awareness of and involvement in their efforts as a volunteer. On the other hand, some participants (and their organizations) were concerned about specific aspects of their work remaining confidential, such as the name or affiliation of their organization, details and outcomes of search operations they engaged in, and the specific locations or content of trainings and tests that I was allowed to observe. This was for purposes of maintaining the privacy of victims, maintaining fair standards for future dog-handler teams who would undergo similar training experiences, and to avoid violating standards regarding what information could be made publicly available. In order to respect the wishes of participants, all participants (humans, canines, and organizations) will be referred to by a pseudonym and descriptions of certain locations or events will be left intentionally vague. Certain organizations
that provided invaluable data, resources, and support during my fieldwork are noted in the Acknowledgements Section of this document, with their consent.

Consent

This research project was conducted under the guidelines of Southern Methodist University’s Institutional Review Board for Human Subjects Research. Accordingly, human subjects were enrolled after providing either verbal or written consent to participate in the study after it was explained to them. This study also included canine participants who obviously did not “consent” in this manner. But since my interactions with them consisted only of those that would be generally expected between people and pets during the course of routine encounters and recording observations of their normal activities, these interactions did not fall under the purview of either the Human Subjects Research or Laboratory Animal Research protocols. Furthermore, in legal terms pets are generally considered property and their owners are responsible for them⁵, therefore the non-human animals do not themselves typically enter into such contracts. So, there was no established protocol of which I am aware governing the establishment of consent of non-human participants in this research.

Legal and institutional concerns (or lack thereof) notwithstanding, the ethical treatment and representation of non-human animals remains an important consideration of multi-species ethnographic work. Search and rescue operations in support of disaster response or searches for missing persons rely heavily on the participation of non-human animals for the achievement of public safety goals, therefore considerations of differential power and representation afforded to human and canine participants should still be taken into account in the conduct of research that will benefit from their input (Hamilton & Taylor 2017).

⁵ This is technically correct but much more nuanced in actual practice. It will be unpacked in greater detail in a subsequent chapter.
Because my involvement in this research included observations of dog-handler interactions as well as some participation in training exercises with participants’ dogs, I considered the question of “consent” of the non-human animals to be a relevant one. As Herzog has pointed out that human considerations of ethical treatment toward other animals is inherently contradictory, varies wildly by species, and is influenced by numerous cultural factors (Herzog 2010), I recognize that my decision to observe and participate in an activity that involves animals working in what could be considered hazardous conditions may not satisfy all readers of this ethnography. However, I will attempt to outline my thought process here.

As I am not an expert on dog behavior, I have elected, in this case, to defer to the wisdom of my human participants on the issue of consent and proper treatment of the canine participants since it turned out to be an issue that many of them had already contemplated. In an interview, one K-9 handler explained that they believed their dog enjoyed training because they always gave the dogs a choice whether or not to participate in training in the first place:

*I’ve developed this approach where it takes a little longer sometimes, but it's a choice-based training, where I really only acknowledge and reward or mark when they're doing what I want them to do. And I get them to do it on their own, as opposed to me saying, ‘No, you have to do this for a certain period of time’. And a lot of the training, the way that I’ve raised my dogs is really based on a little bit of shaping, right? When he makes the right choices, that's when I reward him. It’s really like developing a relationship with a dog that's a two-way communication. As opposed to a dog that is relying upon me to command them to do something, I want my dog to go and be free thinking on its own, whether he’s with me or not. I want him to make the choices. Independence is a big deal for search dogs. They need to be able to think independently...So I give them a choice whether to work.* (Ryan, North American K-9 handler)

In other words, SAR dogs were usually rewarded for working but not punished for failing to work or making a mistake⁶. In fact, some handlers went so far as to note that a handler would

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⁶ It should be noted that this does not necessarily imply a complete lack of coercion. The withholding of praise, attention, treats, or freedom to run around outside of the kennel could be classified as a “negative punishment” according to a behaviorist framework such as B. F. Skinner’s operant conditioning, which has been hugely influential in the development of dog training methods. See Skinner 1951 and Pryor 1999. However, similar ethical
not be able force a SAR dog to work if the dog did not want to\textsuperscript{7}, given the degree of initiative and independent thought that is required of the dog to complete a search successfully. While not all handlers employed the same training techniques and philosophies, the dog-handler teams represented in this study overwhelming used positive reinforcement-based training methods such as rewarding desirable behavior with praise, toys, and food and reported that they believed their dog enjoyed training and working. This is partly because the excitement and value of the reward for making a find must be so great that the dog will be motivated to continue searching for victims through difficult terrain and in unpleasant weather conditions as long as it takes to find them.

Accordingly, I observed that the SAR dogs in training generally exhibited behaviors that I interpreted to be consistent with enthusiastic participation such as excited whining, tail wagging, energetic efforts to get into their training harness (which signals the beginning of a training or work session) and straining to rush out and begin searching as soon as they received the command to do so from their handler. Thus, my interactions with canine participants were limited to those in which I gave praise or rewards or interacted with them in ways that they appeared to enjoy. I did not at any time attempt to force a dog to cooperate with my observations or interactions. I will also note that although search and rescue is dangerous work that does sometimes result in minor or serious injury to search team members, I did not personally witness debates have taken place regarding the use of incentives for human research participants, and SAR handlers are more limited in the ways they are able to communicate their wishes to dogs without the extensive use of shared verbal language.

\textsuperscript{7} This is not a universal sentiment among all SAR handlers in all professional and cultural contexts. Debates about effective and ethical training methods and what constitutes “motivation” continue, especially in circles with military or law enforcement background. See Weaver 2017, Hearne 2016, Pryor 1999 for further discussion of training philosophies.
any serious injuries to human or canine participants during the course of my fieldwork, although I did hear of some such incidents taking place.

**Pseudonyms for Humans**

In accordance with the SMU Institutional Review Board guidelines, I have selected pseudonyms for all participants who agreed to participate in the study in order to protect their anonymity. Allen & Wiles (2016) have argued that allowing participants to select their own pseudonyms may be preferable, as the process of naming is meaningful to research participants and providing this opportunity may be relevant when considering the issues of power and voice in the conduct of research. I find this to be a compelling argument; however I have opted against this option for two reasons. First, as Allen & Wiles also note, there are circumstances in which this approach may not have the desired effect. In other professional capacities I have found that asking people to select their own pseudonym puts the onus on them to select an option that is suitably ‘anonymous’ in that it cannot be easily guessed by other members of their community who know them well and that will not be in some way unsuitable for the researcher’s purposes (e.g. selecting the same name as another participant or choosing something so unserious or unusual as to be distracting when it is mentioned in the context of the research paper).

Second, and more importantly, in regard to providing research participants with some element of power and voice, this approach would not be suitable for the non-human animal participants in this study and therefore could not be applied consistently across all participants. Dogs cannot choose their own pseudonyms, nor indeed are they likely to be concerned with the issue of anonymity. They are however affected by it insofar as identifying them by name would reveal the identity of their handler to anyone familiar with them, and their literal lack of “voice” is already greater than that of the human participants (Hamilton and Taylor 2017). Of course, a
handler could be asked to choose a pseudonym for their canine partner, but this would not avoid the problems noted above regarding self-selecting of pseudonyms and might be even more likely to lead to identification by other members of the participants’ community given that some handlers and breeders tend to use detectable patterns for naming dogs such as selecting names that all begin with the same letter of the alphabet (Carlie, Casey, Camille etc.) or following a theme (Forest, River etc.). Given the existing power differential between human and canine participants, I opted not to use a method of selecting pseudonyms that would additionally privilege the human participants over the canine ones in terms of giving voice in the research project. Someone is speaking for - in this case, naming - the dog in any case, but I am attempting to be intentional about how I represent them vis a vis the human participants.

In selecting pseudonyms for human participants, I have relied on lists of popular surnames in Japan for Japanese participants and popular given names (corresponding to the participants’ preferred gender presentation) in Europe and the United States for participants from those locations, as this reflects the conventions I generally observed in use among each group. Beyond this distinction, I endeavored to select the pseudonyms randomly without regard to other participant characteristics.

**Pseudonyms for Dogs**

I have intentionally selected pseudonyms for the dogs represented in this study that are common dog names with the caveat that they are also common names for people. For instance, “Louie” would be an acceptable choice; “Muffins” would not. All of these names are in English and have been drawn from lists of popular dog names in English (Pregowski 2016) I only selected English names partly for the sake of simplicity since this dissertation is written in English, but also because not all of the dogs had the same national origin as their handler and
some had names in languages other than those spoken by their handler. To attempt to reproduce these variations in the selection of pseudonyms could potentially give unintentional clues to the identity of their handlers and would additionally require assumptions to be made about the dogs’ sense of ethnicity that would border on the absurd.

I decided to exclude names that are not commonly used to refer to “people” in an effort to avoid depersonalization of the non-human animals. This is not because the animals themselves would likely have an opinion about the significance of the name they answer to or whether their identity had been properly protected. But it was my observation that there was a strong tendency among handlers to name canine partners in this way, and indeed Pregowski notes this as a general trend in compilations of the most popular dog names in recent years (Pregowski 2016).

Similarly, in *Adam’s Task: Calling Animals by Name* (2016), noted dog and horse trainer Vicki Hearne opines that training non-human animals is essentially a process of learning what their names are, not just in the sense of having a label with which the animal can be identified and to which they may or may not respond, but in a philosophical sense and in terms of establishing a line of two-way communication in which substantive information is meaningfully communicated between handler and trainee when the name is used. This view of “naming” suggests the meaningfulness of an otherwise meaningless or unintelligible label when it is understood within the context of the dog-handler relationship. So, Hearne elaborates, to refer to an animal as “it” rather than “he/she” or to put their name in quotation marks (e.g. my dog, “Robert”) is to use a label denoting property rather than a name, and to create a distance that, were it to be used in relation to another human, would indicate the subject is one that the labeler cannot or will not talk to. Thus, the name itself is not the point, but the process of naming or
learning what one’s name ‘means’ is key because it describes a mutuality of responsibility and communication.

Given that the theoretical orientation of this study considers the canines to be agentive participants in their partnership with their handlers as well as in the research process, rather than an object to be labeled, I follow the conventions as laid out by Hearne and Pregowski. Furthermore, some handlers in this study mentioned a concern for the way their dogs were represented and perceived in daily life. For instance, one Japanese handler who was critical of the popular trend to dress up pet dogs in clothes commented that one tends to develop a different level of respect for a dog that you just spent the entire weekend working with in physically challenging conditions in the mountains and would feel very silly dressing that same dog up in a cute outfit and driving it around in a baby cart like a stuffed animal toy the next day. I intend to reflect this respect in the names that I represent the dogs with, for the sake of the handlers whose dogs are represented and for the purpose of highlighting that the dogs are included in this ethnography as agents rather than passive objects. People reading about a dog named “Yoda” or “Princess” (both names on the 100 most popular dog names according to the American Kennel Club) may envision an animal very differently than one named “Luke”. This is not a comment on handlers’ choices of names for their dogs, which may indeed be very meaningful to them and deserving of further research, but is an effort to ensure anonymity and respect for all parties while remaining consistent in approach in assigning pseudonyms across species.

**Dog as Research Assistant**

There is one exception to this naming rule and that is when I refer to my own dog, Snow. Snow will appear in a few places in this dissertation, like a scattered flurry, as my research assistant, part of a vignette, or to illustrate a concept described to us by handlers and trainers.
regarding the dog-human relationship. Snow did not travel with me to the portion of my fieldwork that took place in Japan (partly due to the immigration difficulties experienced by foreign animals who attempt to enter Japan, which will be discussed in more detail in Chapter 4), but he was with me for the portions that took place in the US and online, and acted as co-participant observer when I needed a partner to try out training methodologies described by SAR participants who lent me books and advice on learning how to communicate and work better with a dog. At eleven years old, Snow has already passed the retirement age for search and rescue dogs - and is lacking in some of the other temperamental factors that would have made him a good candidate for the job - but he proved more than willing to let me practice with him nonetheless. He also proved indispensable in virtual meetings by breaking the ice with dog training groups online (he is pictured in my profile photos on accounts I used to interact with participants), exchanging introductions in Zoom meetings with the other human and canine participants, and generally introducing me to other dog people as a person who can be trusted and allowed into their network, in addition to the affective labors he already performs as a pet. I hasten to note that Snow was paid generously in treats and praise for his assistance and support, which he enthusiastically provided.

**The Complex Social Identities of Canine Research Assistants, as Experienced by a Brown Dog Named Snow**

I would like to take a moment to discuss the use of canine research assistants and the types of experiences they facilitate. The ability of dogs to act as facilitators of social interaction between humans is well established in the social sciences (McNicholas and Collis 2000; Robins, Sanders & Cahill 1991). Barbara Smuts argues that working directly with domestic dogs puts researchers in a unique position in which they are able to experience their canine interlocutors as both objects and subjects, combining the “objective” scientific perspective with “subjective”
experiences of daily interactions with beloved companions (Smuts 2008). In this way, multispecies ethnographers have successfully worked with canine research assistants to gain better access and insights into the more than human worlds with which they seek to engage (Hansen 2013; Weaver 2017).

In his study of trans-species fictive kinship, Hansen discusses how his two canine research assistants, ARK and Koko Chan, facilitated and illustrated the types of embodied, affective contact that characterize the human-dog bond among pet owners in Japan (Hansen 2013). He remarks that when he took the dogs for walks in parks, they drew him into encounters with other dog owners, which were characterized by touch between the dogs as well as the humans and led to possibilities for the development of further social encounters and connections between himself and the other dog walkers. Further, he notes that these encounters, when driven by the dogs literally pulling him into contact with others, were not guided by “human social constructivist concerns” such as gender, class, or race. In this context, Hansen makes an argument that specifically emphasizes embodiment and affect in social encounters, pointing out that dogs rely less on visual sensory input than humans do and instead favor physical and affective touch, which produces a different kind of interaction between the involved parties.

On the other hand, Harlan Weaver’s account of his research on dog training and animal shelters in the United States also emphasizes the need to feel and imagine human-dog worlds in alternate ways. However, his experiences with his pit bull dog Haley were very much centered around their socially constructed identities. He argues that his identity and that of Haley (a member of an oft-maligned breed popularly considered to be aggressive) were mutually realized through their connection to one another and each of the identities that they brought to the relationship. During his gender transition, Weaver felt that his association with Haley provided
him safety in public settings whereas his whiteness, queerness, and middle-class status led other humans to read Haley as less dangerous (Weaver 2017).

However, the argument that dogs facilitate positive social contact has been critiqued for failing to consider the ways in which relations between dogs and humans of particular race, ethnicity, and class privilege can also contribute to conflict and serve to obscure or reinforce systemic inequity. For instance, in her study of dog walking in a multiracial neighborhood in the United States, Mayorga-Gallo argues that dogs actually helped to reinforce an inequitable system of racial inequality. They did facilitate positive connections between white residents, but dog-based interactions between white and non-white residents were more often negative. By reinforcing an urban, white, middle-class habitus of animal care, these interactions led to Black and LatinX dog owners being marginalized and white residents maintaining power in the neighborhood (Mayorga-Gallo 2018).

To relate this back to Weaver's concept of interspecies intersectionalities, while dogs may be unconcerned with human social categories, they are not immune to the troubling habit of humans to map those identities onto their dog’s bodies. For instance, Weaver points out the problematic tendency among advocates for dog breeds targeted by discriminatory legislation to use the term “dog racism” to garner sympathy for black and brown dogs, which promotes a narrative of “white femininity to the rescue” while ignoring the violence done to humans of color through human racism, including the very act of being compared to other animals (Weaver 2017).

Both of these perspectives illustrate a key aspect of the dog-human teamwork that I attempted to engage with in the course of this ethnography: the need to attend to the interspecies
interaction in ways that are appropriate for both species, and to attend to the ways that social context impacts those opportunities and further shapes the relationship.

The affective, embodied interaction between handlers and dogs is one of the things that makes SAR training enjoyable for handlers and, presumably, dogs. While explaining the need for SAR dogs to ignore distractions and focus intently on their task in order to successfully search for missing people, Jennifer, a bloodhound handler, related a story about a bloodhound who once walked right past a family grilling hot dogs in order to continue searching for his assigned “victim” who was going to reward him with a single hot dog when he completed his assignment to find her. The desire to get the hot dog at the end of the trail is not enough to fully explain this behavior. Jennifer elaborated that the hot dog is not actually the entire reward— the dogs like the interaction with the “victim” who also praises and pets them at the end of the trail. Similar to the importance of voice, as discussed in Chapter 3, this affective encounter is a key part of the rewarding experience, with some SAR volunteers regarded by their colleagues as especially “good victims” because of their manner of interaction and like-ability upon being “found” by the dogs in training.

Sometimes it is a sudden lack which makes the importance of taken-for-granted experiences most strongly felt. During the COVID-19 outbreak which was characterized by periods of varying degrees of lock-down, quarantine and social distancing, neologisms such as “zoom fatigue” have been used to describe the unsatisfying and sometimes exhausting experience of substituting video conferencing technology for in-person contact. This was unfortunately the case during the portion of my fieldwork that took place online during the pandemic. Attempting to interact with non-human animals in this fashion is even more difficult.⁸

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⁸This is not to say that images of non-human animals are not used in video conferencing. But it is usually not for the purpose of having meaningful interspecies communication. Some organizations such as Sweet Farm, a non-profit
Even prior to the COVID-19 pandemic, National Geographic’s “Weird Animal Question of the Week” series addressed a question posed by readers wondering why their dogs could not seem to communicate with them over voice calls or video conferencing technology. The author noted several reasons including dogs’ preference for olfactory stimuli and differences in their ability to process visual input from a screen (Langley 2015). To Hansen’s point about the importance of embodied affect in human-pet relationships, I noted during my fieldwork that the lack of opportunities to physically engage with canine partners in virtual settings also significantly inhibited rapport building and simultaneously drove our conversation towards more visual aspects of the dogs’ physical characteristics such as breed and sex, which tended to be bound up with further implications for the social identities of the human to which they were attached. Take, for example, these two interactions involving my canine research assistant, Snow:

**In-person Interaction:** On a few occasions, Snow accompanied me to training events with the US-based SAR participants to act as a “distraction” for the other dogs to practice ignoring while they worked. Search and rescue teams that work in cities and urban areas could travel through populated areas including parks, neighborhoods, hiking trails or any number of other places where people could be walking with their pet dogs. So, Snow and I would walk around near the dogs while they were working so that they could practice resisting the urge to rush over and meet another dog when they were supposed to be focusing on their search.

Of course, it was also difficult for people to resist “meeting” the new dog and, after the exercise was finished, Snow was allowed to come over and meet the human team members. He immediately rushed over and dramatically sat down in front of one team member, Sandra, and

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organization interested in reducing factory farming, have attempted this to some extent. They allow businesses to book “animal ambassadors” such as goats or llamas to join their meetings (for a fee) and learn about the animals and NPO’s mission. See https://www.sweetfarm.org/goat-2-meeting
then poked her leg with his paw a few times. We realized that since Sandra had been the “victim”
during the training exercise she still had some vienna sausages in her pocket, a fact which was
not lost on Snow. Laughing, she asked me if she could give him one and I consented. When she
handed the sausage to him, he delicately took it from her hand while she pet him. “Oh! He’s so
gentle”, she exclaimed. Immediately, conversation took off among everyone along the lines of
“My dog will practically take your hand off if you’re not careful”, and “Snow is so sweet”, along
with comments on various other aspects of dog behavior, personality, and treat preferences.
Sandra continued to pet Snow - and I’m fairly sure he ended up getting another sausage out of
the deal - as animated conversation carried on until it was time for the next exercise. On
subsequent occasions, some of these participants inquired about how Snow was doing, which
prompted further conversation.

Virtual “Interaction”: Virtual interviews with handlers conducted by video conference
almost invariably included an introduction to the handler’s dog, which tended to be present and
often in physical contact with the handler during the interview in cases in which the dog lived
inside the handler’s home. Similarly, my research assistant Snow, who also lives in my home,
accompanied me in the interviews. However, the introductions had more of a show and tell
quality than that of an actual contact. These brief excerpts from the transcript of a recorded Zoom
interview are characteristic of attempted interspecies contacts that took place during virtual
interviews:

Kim: “Is that your puppy?” (Snow comes in view of the computer screen and taps my leg with
his paw, prompting me to look down)
Kara: “Yes. He's letting me know that he wants me to let him out.”
Kim: “Hey buddy. What a cutie….Hey buddy”. (Snow glances around but does not otherwise
respond)
At this point, we returned to our discussion of dog breeds. There is a debate among handlers about whether “floppy-eared” or “pointy eared” dogs are better for search and rescue. We note that Snow is a “pointy eared” dog but Kim prefers “floppy eared” dogs like her Labrador, Tucker, because of their warmer disposition.

(Later, Tucker appears on screen at the sofa chair where Kim is sitting, while we are talking about him)
Kim: “Yeah, there he is”.
Kara: “Hi Tucker” (Tucker does not look at the screen)
Kim: “He hears his name probably. He's like…” (Kim trails off and begins speaking directly to Tucker while reaching out to touch him)
Kim (to Tucker): “Are we talking about you? We are”. (Turning back to me, still petting Tucker) “Here's my Doberman” (turns camera to show Doberman sitting by the window nearby). “He's always on the watch. Always his head on the windowsill hunting for squirrels”.
Kara: “Hi”. (I wave at the dog on the screen but get no response)
Kara: “That's how Snow is, too. Right now I don't have a window open for him, but he's still always there. (turning my camera to show Snow, who is lying on my bed looking out the window, not paying attention to us anymore). “There he is now.”
(Silent Pause...)
Kara: “So you have two male dogs then?”
Kim: “I do. Yep.... of course, mine are both neutered. And they don't seem to care either which way. I probably wouldn't have two high-drive un-neutered dogs at my house. Just because I would worry a little bit…”

For the next several minutes of the interview we proceeded to talk about neutering dogs and the interaction of behavioral characteristics related to breed and sex that can pose difficulties for handlers who keep multiple dogs at their home. No more attempts were made at interacting with the dogs.

In the in-person interaction, Snow exercised choice in who to interact with and the moment of physical contact between them produced the type of affective encounter suggested earlier by Hansen. In the Zoom meeting however, dogs were present but the technology we used privileged human perceptual preferences and, with the dogs’ preferred modalities of interaction cut off, the attempts to interact were unsuccessful despite our futile and self-absorbed efforts to
engage them with tactics like moving the camera or trying to get their attention verbally or with physical motion on the screen.

The richness of the “virtual” encounter was not only predictably lost, but it instead led to an increased focus on the visually identifiable social categories into which the dogs, and by extension we humans, fit. Focusing instead on dog breed and sex - I found myself asking about these concepts more frequently in virtual interviews. Since Snow is a German Shepherd/Australian Shepherd mix he is identified as a “pointy eared” dog which locates me in a particular position in regards to a lively debate among handlers about dog breed preferences which will be discussed in Chapter 4. In some interviews, this meant that I gained rapport with other “pointy-eared” handlers who launched straight into telling me about their views on the breed debate. In fact, people would sometimes ask me if Snow was a police dog. I was never entirely sure if this question was prompted more by Snow’s visual similarity to German Shepherd dogs which are associated with police work or by the other person’s knowledge that I had previously worked in law enforcement, or a combination of both. But somehow, even though I introduced Snow as either a pet or research assistant, our previous employment histories were routinely conflated.

As Haraway notes, “beings do not pre-exist their relating” (Haraway 2003, p. 6), rather they constitute each other and themselves through reaching into each other. The co-constitution of handler and dog will be explored later in Chapter 4. Smuts applies the term “personhood” to elaborate on this problem, suggesting it as a useful concept for describing an interspecies relationship, not an attribution of human-like qualities to other animals. She argues that it is only

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9 He was not; Snow was one of several stray dogs who I found on my beat and elected to take home rather than turn over to Animal Control for euthanasia during my career as a police officer, to the eternal consternation of my supervisors.
by relating to other animals as individuals, rather than as anonymous representatives of their “species”, that we are able to have a personal relationship with them. On the other hand, “when a human being relates to an individual nonhuman being as an anonymous object rather than as a being with [his or her] own subjectivity, it is the human and not the other animal who relinquishes personhood” (Smuts 2008, p. 125).

According to this analytical framework then, my interactions with handlers’ dogs’ in virtual interviews depersonalized them from the outset because we attempted to interact through a medium which - by human design - allowed the dogs to be perceived by us but not vice versa, a problem which was subsequently compounded by my inordinate focus on the broad social categories to which they could be visually assigned such as breed and sex.

**Chapter Overview**

Over the course of this research, I realized that handlers tended to experience their relationship with SAR dogs as a personal one, even though they live and work in contexts in which the dogs are routinely depersonalized. This study examines the qualitative experiences of dogs and handlers as they strive to develop a successful relationship through working, training, and living together. In order to work effectively, these teams form affective partnerships characterized by mutual advocacy, correspondence, and trust, which highlight the co-constructed nature of more-than-human worlds and allow members of both species to contest certain framings of their partners in their social worlds. These concepts (partnership, advocacy, correspondence, and trust) will be illustrated with ethnographic examples of search and rescue teams learning to work together in training and operational settings. The Chapter sub-titles reflect common advice provided to handlers to help them develop a mindset of active engagement with non-human colleagues. Each chapter will further explore how handlers grapple
with contemporary controversies in their field which are often framed as questions of
effectiveness and personal choice in regards to the development of a successful dog-handler
relationship, but that I argue are as contentious as they are partly because they are animated by
strong affective multispecies bonds and are, at their core, debates about deeper questions and
shifting attitudes regarding the responsibilities of humans to their non-human partners and to the
global (multispecies) community as a whole.

Chapter 2 examines the concept of teamwork between species who, despite tens of
thousands of years of co-evolution, have difficulty understanding one another (a problem not
totally unlike difficulties that occur between humans). This chapter highlights the debate among
handlers about whether dogs are rightly regarded as equipment or partners and explores affective
reasons why handlers generally reject the “equipment” model as unworkable. Chapter 3 applies
feminist and queer theory to examine the performative aspects of gender and sex affecting both
female dogs and female handlers working in public safety, focusing particularly on the advocacy
that handlers and dogs engage in for each other’s fuller inclusion in public life and expanded
opportunities for civic engagement.

Chapter 4 returns to the concept of “interspecies intersectionality” to analyze socially
constructed identities of handlers and dogs, focusing on problematic associations between breed
and race/ethnicity/national origin, especially as they play out in volunteer-based SAR teams
which are attached to government entities with certain racist and colonial histories. This chapter
will explore the tension handlers sometimes expressed about selecting a SAR dog who is
significant as both an individual and as a member of a breed, a process which is complicated by a
complex mesh of biological and social histories predating both handler and dog. Finally, Chapter
5 examines mutual trust as essential to the provision public safety, which is accomplished
through social relationships between interspecies teammates and between state, society, and public servants. Special attention is given to the ethical implications of working with a trusted and trusting partner in a potentially hazardous job for which full interspecies communication and consent is not realistically attainable.

I conclude by discussing the insights and opportunities K9 search and rescue teams provide for multispecies “getting on together” (Haraway 2016) in a global context of perpetual threat of ecological and human-driven disaster by returning to one participant’s comment that dog-human teamwork is possible in spite of substantial differences given that “even though we are not doing the same thing, we are doing it together”
Chapter 2

PARTNERSHIP: “READ YOUR DOG”

The popular image of the Saint Bernard dog carrying a barrel of liquor to travelers lost in the snowy Alps bears little resemblance to the present-day search and rescue dog. Technically, ‘search and rescue dog’ is a misnomer. Dogs that are involved in search and rescue operations are particularly well suited to searching for—not actually rescuing—lost or missing people. The dogs’ role is to locate the person—or their remains—and then alert their human handler; the handler is, in return, expected to “pay” the dog with a highly valued reward in the form of food or play with a special toy. At this point, the “game” is over; the dogs are not normally expected to perform the actual rescue or removal of the missing person from the spot where they are found. Their contribution is the ability to identify and locate scent particles in a way that humans—and most technology—are incapable of.

10 “Reading” one’s dog is a critical skill that canine handlers are trained to develop. It refers to paying attention to and understanding behavioral and communicative cues from the dog, just as dogs do when interacting with their handlers. See Bryson 1991, p. 207: “It is critical that you learn to read your dog’s alert. All your teamwork depends on it.”

11 These Saint Bernard dogs and the monks living in the monastery located in the notoriously treacherous Saint Bernard Pass, for which they are named, are recognized by many practitioners as the earliest known example of organized canine search and rescue teams, dating back to at least the 1700s. And, as a Swiss dog trainer I spoke with was quick to point out, present-day breeders of Saint Bernard dogs are surely not harmed by the perpetuation of the popular misconception. For more information, see: https://www.smithsonianmag.com/travel/a-brief-history-of-the-saint-bernard-rescue-dog-13787665/
As with any specialized profession, SAR handlers sometimes have to dispel popular misconceptions about their work. During one training session with DRDN, while I took a break from hiding for the dogs inside of a box under a pile of overturned furniture in the abandoned middle school building that we were now making regular training trips to, Tanaka-san told me about a common misconception people have about SAR work: the romantic idea that SAR dogs know that their job is to rescue people who need help and that they become excited if they rescue someone and sad if they fail. That is of course not what they are doing, he said. Their goal is not to rescue a person but to get the reward that they are accustomed to receiving upon successfully locating a person when their handler gives them the command to search. The handlers are searching for victims; the dogs are playing a game in which they hunt for a valuable treat. But, Tanaka-san admonished, there is no need to be disappointed upon learning that fact. The dogs are often the only members of the team who are capable of finding any victims. And “just because we are not trying to do the same thing does not mean we are not all working together on the same team”.

Training then becomes an exercise in teamwork between species with different goals and abilities. ‘Training’ refers not to teaching a dog how to search (they already know how to do that), but to learning to communicate the nature of the game and learning to “read the dog” in order to know how to assist them or where to direct the search effort. The dogs’ contribution lies in their vastly superior perceptual abilities. With more than 100 million sensory receptor sites in their nasal cavity, compared to humans’ mere 6 million, dogs can detect odors literally thousands of times better than humans can (Buzhardt 2020). A trained search and rescue dog can detect the scent of a person from as far away as a quarter of a mile or identify and distinguish human scent
from that of other animals on remains smaller than a single tooth or smear of blood. In fact, dogs outclass humans in their ability to perceive odor to such a degree that it can create certain disadvantages for human handlers during training.

This chapter provides contextual information about how canine search and rescue teams operate and explores handler narratives of what it means to work as a team with another animal who does not experience the world in the same way. As one handler described it: the difficulty is in not being able to see what someone else smells. I will end by situating handlers’ descriptions of their relationship to a SAR dog as both a pet and working partner within the literature on domestic dogs as family members and discuss implications of the affective nature of these bonds for working as volunteer emergency responders in potentially hazardous conditions.

Types of Search and Rescue Teams

There are three main disciplines that volunteer-based canine search and rescue teams specialize in: air scent, human remains detection, and trailing. Air scent dogs search an area by detecting scent particles in the air that are carried by the wind from a person who is in that area. Once the dog has detected the scent, they trace it to the source and, if successful, locate the person. The dogs are trained to alert their handler, usually by barking. They may be trained to remain in place and continue barking until the handler arrives or they may return to the handler and guide them to the person (this is called a re-find). This type of dog could be deployed, for example, to find a lost hiker in a wooded area.

Human remains detection dogs (also called cadaver dogs) are similarly trained to search for the scent of deceased humans and human remains, rather than live humans. They are further trained to alert their handler only to human remains, not those of other animals. Human remains
detection dogs can locate even extremely small pieces such as bone fragments or teeth, as well as remains that are buried under feet of snow, water, dirt or debris. They could be deployed on missions to recover bodies of people who are already believed to be dead as a result of a natural disaster, criminal activity, or who have been missing for a long period of time.

Both air scent and human remains detection ask the dog to locate the scent of a human - any human - in a given area (unless they are taught to scent discriminate). This means that they will alert on any person that they come across, regardless of whether that is the person the handler intended to find. Trailing, however, asks the dog to locate the scent of a particular human by following that person’s scent from their last known location. The dog is presented with a scent article such as a piece of clothing worn by the missing person that will be saturated with that individual’s scent. The dog will then follow the scent particles shed by that individual\textsuperscript{12} along the route that was taken by the person from the starting location. These dogs are particularly useful when attempting to locate a person who may be in a crowded public space such as an Alzheimer’s patient who wandered away from an apartment or a child lost in a public park or campsite. Like human remains detection dogs, trailing dogs can also participate in law enforcement-related missions such as searching for a fleeing suspect.

\textsuperscript{12} These ‘scent particles’ are primarily produced by the activity of the host of unique bacterial inhabitants which are present on dead skin cells that are constantly shed by the person in question (American Rescue Dog Association 2002)
Fig 2.1 A human remains detection dog in Europe practices locating human scent coming from beneath the rubble

Fig 2.2 An air scent dog in Japan alerts her handler during a public demonstration that there is a person lying down inside the structure
Fig 2.3 A trailing dog in the United States is trained to only focus on the scent of a specific person and to ignore others while she is working.

Additionally, some SAR dogs are cross-trained in multiple disciplines, and SAR dogs from any of these disciplines can be trained to deploy in various operational settings including wilderness, mountain/avalanche, water, urban/disaster etc. In addition, dogs can perform a host of other detection activities unrelated to locating victims, with applications to law enforcement, military, and medical fields, to name just a few. For instance, the European team that works with DRDN in this study recently began a training program for dogs tasked with detecting particular types of cancer in human patients. Canines from some of the US teams represented in this study have participated in missions to help law enforcement agencies locate clues or items belonging to a suspect in a crime. Other specialties common among detection dogs working in government or military jobs include detection of contraband such as explosives or narcotics. Some of these job functions will be briefly mentioned in later chapters but this ethnography is primarily concerned with search and rescue teams locating missing persons or their remains under the circumstances described above.
Disaster search and rescue is sometimes considered a fourth discipline, although it is really an application of one or more of the other disciplines in a particular setting that require additional specialized training. Disaster search and rescue teams (also called urban search and rescue) are advanced teams that go through a lengthy evaluation, training, and certification process to prepare for deployment in the stressful and hazardous conditions found at disaster sites. A disaster dog might be deployed to find live or deceased victims following a disaster ranging in severity from light damage caused by a severe weather event such as a flash flood to collapsed structures resulting from large-scale natural disasters or other catastrophic events such as a bombing or terrorist attack. The latter cases are the most rare and serious but also the most well-known scenes to which SAR teams might be called.

Many people who are familiar with canine search and rescue teams think of images of SAR teams operating at disaster sites such as these even though search and rescue operations take place in more mundane circumstances far more frequently. For instance, the 1995 Oklahoma City Bombing and 9/11 terrorist attacks prompted some of the first large scale coordinated K9 SAR disaster response efforts in the United States and led to an expansion of veterinary knowledge regarding K-9 capabilities as well as the hazards to physical and mental health that those teams can encounter (Duhaime et al. 1998; Hunt et al. 2012). These events also resulted in highly publicized and moving images of search and rescue teams combing through rubble for survivors. Similarly in Japan, the 1995 Kobe Earthquake and 2011 tsunami/earthquake/nuclear accident (commonly referred to as the 3.11 disaster) proved to be learning experiences for disaster response efforts in myriad ways, one of which was the need to drastically increase the capacity of domestic K-9 SAR teams that could respond to emergencies.

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13 These will be discussed in greater detail in Chapter 5
given that several international SAR teams attempted to deploy to Japan but their efforts were delayed by cumbersome immigration and quarantine policies that kept foreign search dogs from being allowed into the country quickly enough to help. One DRDN member noted that nowadays there is generally a large uptick in visitors and donations made to their website and social media outlets immediately after a disaster occurs, as people rush to contribute to relief efforts in whatever ways they can.

**History and Organization of SAR Teams**

Formal search and rescue operations as we know them today have their origin in police and military functions of the late nineteenth and early twentieth century, beginning in Europe and shortly thereafter spreading to the United States and other parts of the world. Bryson (1984), citing Chapman’s *Police Dogs in America* (1979), traces the origin of the formalized use of search dog teams in the United States to the importation of the Belgian model of the police canine unit in 1907. In addition to searching for missing people, these canine teams performed traditional law enforcement functions such as locating evidence and tracking and apprehending suspects. Over the ensuing decades, the practice of using canine teams spread widely across police agencies and other government sectors in the United States and Europe, and eventually led to more specialized functions such as narcotics and bomb detection (Bryson 1984, Chapman 1979). Additionally, formally trained search dogs were used in military applications as far back as the First World War for tasks including locating injured personnel on the battlefield.

Skabelund’s concept of “canine imperialism” posits an historical link between canines and imperialism within a configuration of relationships between colonizers and colonized, referring to both the actions of individual dogs accompanying Western and, later, Japanese colonizers, as well as a particular set of dog-keeping and breeding practices that began in Britain.
in the late nineteenth century and quickly spread to the rest of Europe and the United states and later across the globe concurrently with imperialism (Skabelund 2011). Skabelund argues these practices changed dogs and their relationship with humans. Dog ownership became a symbol of status, and differences in dog appearance and behavior signaled class difference. Western practices of breeding and dog keeping aided in the spread of, and were simultaneously spread by, twentieth century projects of imperialism, capitalism, and war, through their figurative deployment as metaphors for nationalism, civilization and notions of racial purity as well as through their literal deployment as military, police, and guard dogs.

This idea that dogs are consequential social actors in transnational events that they shape and are shaped by is not a recent development. Skabelund further engages with debates on domestication that recognize it as an ongoing process of co-evolution in which humans and dogs continuously evolve together through their interactions (Lien, Swanson & Ween 2018; Pollan 2001). This suggests that rather than something humans have done to other plants and animals, domestication may be a strategy employed by those other species to advance their own interests and, consequently, they are not without agency in the domestication process. Here, Skabelund playfully inverts the concept of “canine imperialism”, noting that even during the imperial projects of the twentieth century, the dogs who accompanied human colonizers were never fully under human control and clearly exercised agency in their particular ability to forge affective relationships with and influence over those humans. And while he stops short of blaming dogs for the human imperial projects of the twentieth century, he suggests their influence over humans represents another type of canine imperialism or “empire of and by dogs” (Skabelund 2011).

Following Skabelund’s assessment of the imbrication of individual human-dog relations within larger state and transnational projects, I suggest that canine search and rescue teams’
training occurs in the context of both human-dog and state-citizen relationship formation. It is instructive to note that this is a function that, in most present-day neoliberal states, takes place largely in the ‘third sector’ as Ogawa (2009) refers to volunteer efforts taken on by civil society. As a non-profit organization with a close working relationship with the state, volunteer SAR organizations - like Skabelund’s canine imperialists - are caught up in but not entirely under the control of state projects. For instance, the usefulness of dogs as public relations tools to be deployed by unpopular government agencies or to bolster waning support for security efforts will be discussed in Chapter 5. However, as handler narratives from this chapter will demonstrate, the bonds dogs form with their handlers, as family pets and work partners, tend to allow them to resist objectification and devaluation.

**Neoliberal Privatization of Government Functions**

Despite their historical association with military and law enforcement functions, contemporary K-9 SAR teams are quite often operated by non-profit organizations (NPOs) staffed by civilian volunteers and funded in large part by donations (although there are, of course, exceptions). Under this model, volunteer-based SAR teams are normally affiliated, either formally or through less formal contract-based agreements, with authorities responsible for emergency management at the federal, prefectural/state, or local level as well as with organizations that provide services internationally in the case of large-scale disasters, but are primarily staffed and operated by volunteers. For instance, in the United States, K-9 SAR teams operate at various levels of government ranging from a FEMA Task Force, which may be composed of civilian volunteers and other fire department and emergency service agencies, to a volunteer posse⁢ of a county sheriff’s department, to a small, local NPO whose members can be called up by municipal police or fire departments as needed. Similarly in Japan, volunteer SAR
teams (of which there are more than 40 incorporated as NPOs as of the writing of this chapter) tend to operate under agreements formed with prefectural authorities such as fire departments. And international organizations such as IRO (International Search and Rescue Dog Organization) provide international standards for training and certification of member organizations of various capabilities and provide opportunities for exchange of information and best practices between teams from diverse geographic locations.

As a result of this mode of organization, it is generally the case that search and rescue dogs belonging to voluntary organizations live at home with their handlers who are usually private citizens working on a volunteer basis and devoting a substantial amount of time and resources to training with their dog(s). Virtually all of the dog-handler teams represented in this ethnography share that in common and belong to voluntary organizations such as the ones described above, although my understanding of the topic has been enriched by interviews and informal conversations with K-9 handlers working in law enforcement or military assignments and other full-time professionals in training or administrative roles in governmental and non-governmental agencies involved in search and rescue operations.

The privatization of public safety functions formerly under the purview of government services is theorized by Daniel Goldstein’s “critical anthropology of security”, which has described security, including efforts to address environmental threats, as a new paradigm that emerges in the cracks and failings of neoliberalism in which citizens are increasingly made to be in a perpetual state of preparedness and responsible for the maintenance of their own welfare (Goldstein 2010). Similarly, in The Failure of Civil Society (2009) Ogawa notes the proliferation of NPOs since the 1998 NPO law in Japan following the failure of the state to respond adequately to the 1995 Kobe Earthquake. Ogawa argues that civil society (including NPOs),
heavily encouraged by the state, have increasingly taken on the burden of solving a vast array of social problems. He describes how NPOs promote a new image of an ideal citizen (shimin) who actively volunteers to help the community in cooperation with the government and argues that Japanese NPOs are caught between the competing interests that result from being closely aligned with the government while relying primarily on volunteer labor, which promotes a more flexible independent organizational culture. Secondly, Ogawa argues that while the Japanese state is attempting to craft an ideal for Japanese citizenship that involves volunteering and civic participation in order to take on these duties, the individual practices of citizenship may come into conflict with state-prescribed roles and values. This is consistent with the findings of Watanabe (2013), whose analysis of volunteers in Japanese NGO's working on international development projects revealed competing conceptions of “Japaneseness” as it fits into modernity, and Leheny (2003), whose study of the involvement of the Japanese government in individual leisure activities and preferences shows the political importance of these apparently personal activities to efforts by governments to be recognized as belonging with other industrialized nations. But, whereas Ogawa conceives of this “NPO-ization” of Japan as part of the larger spread of global neoliberalism with civil society cast in a relatively weak position compared to the state, Muehlebach’s (2012) analysis of “ethical citizenship” in Italy suggests that the failure of the Italian state to provide for the social and economic needs of its marginalized citizens leads to the development of a strong sense of moral responsibility among citizen volunteers to perform the missing care-work. Thus, volunteerism and unremunerated labor, increasingly performed by and for marginalized citizens, is reframed as ethical citizenship and garners public support by appearing to heal the damages of an unfeeling state and promote a popular belief in the responsibility for social compassion among the citizenry in general.
I suggest that in the particular case of K-9 SAR teams occupying this space in the “third sector” (not just in Japan but also in the United States and Europe), the strength of the individual human-dog relationship provides a strong affective basis from which state efforts at promoting popular support for and involvement in domestic security involvement are drawn, but which simultaneously put teams in a position to advocate for the rights of their canine partners as deserving of greater consideration as public servants.

Taking Perceptual Differences Seriously

In studies of canine olfaction, dogs consistently demonstrate the ability to detect a wide variety of targets, including humans, wildlife, agricultural products, contraband, and even diseases that are undetectable or difficult to detect with human senses (Cablk et al. 2008). Artificial “noses” that match the capabilities demonstrated by detection canines have yet to be developed. Importantly, canines are further capable of generalization, meaning that they can learn to identify the scent of individuals within a certain class (i.e. species) and then go on to detect novel individuals of the same class who they have never encountered before. This is particularly important for dogs involved in search and rescue as they are required to search for missing people whose scent they have never encountered. This means dogs can be trained to search for a variety of individual humans and understand that they are tasked with searching for other members of the category “human” - but not non-human animals - regardless of differences in factors such as age, sex, race/ethnicity, health condition and so on. Because the olfactory system is complex and not yet completely understood by scientists, it is difficult for canine handlers to fully understand how scent works or how to optimize canine performance with search and deployment strategies (Cablk et al. 2008).
It would appear that dogs are able to exploit this difference in perceptual ability, at times. Several handlers related accounts of their dog attempting to “cheat” during training exercises by pretending to have found something in order to receive their reward when in fact they had not found anything. This would be considered a false alert, which can also occur if a dog is simply mistaken about a scent they are trying to detect. In cases where a team is searching for a source that is invisible to the human partner - for example a person buried under dirt or debris or a tiny bone fragment that the handler would be unable to identify - it is possible that the handler would not know whether the dog had performed the task correctly. If this occurs during training, the handler can check to make sure the dog is correct before rewarding them because the handler or another team member will know where the training source is located. But in the case of a real search, the handler will not know where the source is located (hence the need for a search team) and therefore has to rely on the dog to find it. As a result, it is very important for the handler to learn during training how to tell if their dog is attempting to “cheat” at the game and make sure to never reward them for it so that, after extensive repetitions in training, the dog can be relied upon to only alert when they have actually found something.

But, it is not as simple as that. Just as handlers are frequently encouraged to attend to their dogs’ nonverbal communication (i.e. “read your dog”) in order to recognize when they are detecting odor or having difficulty in a search, dogs learn to read their people, too. People who know where the thing they are looking for is located tend to give non-verbal clues such as staring at it or slowing down when they pass nearby, even if they do not intend to do so. Thus, a handler can inadvertently tip off their dog to the location of the source rather than letting the dog work it out on their own and improve their skills. This effect was rather comically pointed out to me on one occasion during a training exercise in the United States in which human remains detection
dogs were training in a wooded area. Besides the dogs’ handler and another team member, several observers and I followed along behind the dogs to watch the exercise. Several dogs completed the search and, by the third repetition, even though the next dog was unaware of the location of the training source material, all of the humans were. As we followed the dog through the area, moving ever closer to the large tree where the source was located, we naturally all slowed down and watched the dog as he approached the correct area to see if he would locate the source. At one point, the dog turned around and looked at the crowd of 6 people standing and staring at the tree, and promptly walked up to it and alerted on the source.

This ability to observe subtle human behavior to infer their wishes is not unique to dogs. It is known in psychology as the “Clever Hans” phenomenon, named after a horse called “Hans” who, in the early 20th century, became famous for his apparent ability to solve mathematical calculations and provide answers to them by stamping his hoof the correct number of times. Subsequent investigation revealed that Hans could not, in fact, understand mathematical equations but was quite adept at reading microscopic, unintentional cues in the facial expressions of his handlers which he would use to determine how many times to stamp his hoof in response to the questions posed to him. Originally regarded as hoax perpetrated by Hans’ owner, it was in fact a startling discovery about animal intelligence (although not mathematical ability) in that Hans was able to perform this way when questioned by other people who were not intentionally cuing him. However, he was unable to answer questions correctly when he could not see the face of the questioner. Rather than a disappointing hoax, this incident led to the recognition that tests of animal cognition must be conducted under circumstances in which none of the human parties involved are able to even unintentionally provide cues to their animal interlocutors (Samihita & Gross 2013). Accordingly, when training with more advanced dog-handler teams, and in most
certification tests that teams are required to pass in order to begin performing live missions, SAR teams are required to perform searches in which the location of the source is unknown to both dog and handler, a sort of double-blind test.

However, this still does not completely solve the problem of the perceptual imbalance. During a mission readiness test for several European disaster teams, Anna, one of the lead trainers and evaluators explained the degree of care that is taken to ensure that the testing process is as rigorous and fair as possible. This is crucial because these teams have trained for years to reach this point and their ability to perform reliably in a real disaster will mean the difference between life and death for any victims they might find. Disaster teams, in particular, engage in the life-saving work of searching rubble piles left behind by collapsed structures under which victims could be buried, dead or alive. If a victim is located in these conditions, a rescue team may need heavy equipment to move rubble and extract the victim safely. This is a time-consuming process that must be accomplished as quickly as possible in order to reach victims while they can still be saved. Part of the reason canine teams are so useful in disaster situations is that canines can search an area much faster than humans or mechanical search tools can, and they are able to access small areas that are inaccessible to humans. However, if a dog gives a false alert (i.e. giving an indication in a place where there is no victim or the victim is already deceased) it could divert crucial rescue resources away from areas where other live victims are located.

Training scenarios are designed to mimic real disaster conditions by either placing a live person under rubble or using a system of hoses to pipe in air containing human scent into a particular area of the rubble pile that would not be safe to place a live person in for training purposes. The search team has to be accurate, so the test scenarios are developed with exacting
precision and are designed to be extremely difficult and the evaluations extremely critical.

However, Anna explained that if, during the test, a search dog makes a mistake by either alerting when they are not near the source or failing to alert when they are, the human partner can never truly know whether the dog was “wrong” in terms of whether or not the scent was there. The human participants can “know” with certainty the location of a person or their remains based on the fact that they can see them or have been informed by another member of the team that they are there, but they can never know what the person smells like to the dog and where exactly the scent of the person has traveled. As one handler put it, “we can never see what they can smell. If we could then we wouldn’t need them”.

There is plenty of science behind understanding how scent behaves in various conditions based on a host of factors including weather conditions such as temperature, humidity wind, time of day, length of time the source has been in place, the types of materials and structures involved. Anna had given a lecture about this during a previous training retreat attended by DRDN members. But even with an extensive academic understanding of the chemical nature of scent and its operation under various circumstances, she admonished, the most knowledgeable handler or test evaluator cannot directly perceive it and, thus, can always be fooled. Therefore, even if a dog misses a victim or gives a false indication during the test - something for which the team could potentially be immediately disqualified - it would be unfair to fail them unless and until another team runs through the same exercise. It is possible that another team would make the same “mistake”, which would mean that the scent coming from the mock victim was doing something the humans who prepared the scenario did not expect and could not perceive. For instance, in the case of a mock victim buried under the rubble of a collapsed building, it could be that the wind or temperature had changed over the course of the day and now the scent of a
person buried under the rubble was coming out of a small opening in the collapsed structure that the test organizers were not aware of and the dog was detecting it some distance away from the location of the victim, which could cause a dog to give an alert in an unexpected place. Alternatively, if all of the dogs performing the same test fail to alert on the victim, it could be concluded that, for whatever reason, the test scenario was unfair. The point was, even if you think you know for sure where a victim is located, you never know for sure whether their scent is present or absent until another dog confirms it.

Thus, Anna concludes that the dog is said to be under the handler’s ‘control’ but this means that the dog is attending to the handler and is responsive to commands they give about where to search and where not to go. But the handler does not and indeed cannot direct the actual search because they lack the sensory capabilities to do so effectively.

This contemplation is included to illustrate the extent to which canine handlers attempt to understand the ‘minds’ of their canine partners in order to develop more productive partnerships and increase their operational capabilities as a team. I consider this account to be an example that reflects Augustin Fuentes’ sentiment in “The Politics of Species” that the tendency to treat other species as inferior ignores their rich mental, emotional, and social lives and misses the chance to recognize their adaptability and flexibility to live together in human social worlds in sustainable ways (Fuentes 2013). Fuentes was not necessarily speaking about domestic animals who already share in aspects of human social worlds, but I think it is still useful for framing multispecies interactions generally, especially ones that not so long ago would have involved the use of terms such as “master” or “owner” to describe the behaviors of the human handlers toward their canine partners (and still would in some circles). The story illustrates how the dog-human team is continuously adjusting, renegotiating and responding to feedback even in the face of incomplete
information and extreme imbalances in various capabilities as well as the inability to really know exactly what the other party is thinking. The successful team must engage in a two-way communicative process that accounts for the agency and reliability of both parties in order to get the outcomes they want (which, recall, are not the same thing: the human wants to find the missing person and the dog wants to get their prize for winning at the game). According to the perspective of Anna and others who share her approach, in order for the game to work, the dogs cannot correctly be considered ‘inferior’ partners in the dyad regardless of any social history that might suggest otherwise.

Nevertheless, to assign internal mental states such as “cheating” or “trust” to a dog playing a game of hide and seek might initially be regarded as sentimental, anthropomorphic, or unserious by some. While I cannot speak to the internal mental states of my interlocutors any more than they can speak to those of theirs (Desjarlais & Throop 2011), I would offer the observation that, for the most part, search and rescue volunteers are people who engage in a serious business of providing public safety services under often hazardous conditions. When handlers attribute human-like thoughts, feelings, and behaviors to the dogs, I read it as a genuine attempt to think and empathize with a valued partner in the interest of building a more effective working relationship, rather than a naive attempt to imagine dogs as little furry humans.

In discussing the idea of animal cognition in “Are We Smart Enough to Know How Smart Animals Are?”, Frans de Waal (2016) points out that anthropomorphism (assigning human-like characteristics to other animals) is only a problem in scientific research if it is a stretch. Species that are more closely related in evolutionary terms should be expected to have more similarities to one another than they do with species to which they are more distantly related. The a priori rejection of human-like traits in animals or animal-like traits in humans could be described as
“anthropodenial” – a sort of opposite of anthropocentrism in which humans unjustifiably deny obvious similarities between humans and other animals. Citing Burghardt’s concept of “critical anthropomorphism”, de Waal argues that the application of anthropomorphic language to the behavior of other animals in ways that allow us to make predictions that can be borne out by actual experiments would be a valuable source of hypotheses. De Waal proposes the additional measure of using empathy in dealings with other species and that “instead of making humanity the measure of all things, we need to evaluate other species by what they are” (de Waal 2016).

This combination of recognition of difference along with humility in the face of it was a recurring theme in my conversations with SAR canine handlers who recognize that they participate in an activity with another animal on their turf, so to speak. In describing her sense of the responsibilities of the handler and dog to one another, one handler put it this way:

*He’s the star of the show. I’m honestly just there to drive him around. He can’t drive. If he could try to do this on his own...This is what he loves to do. And this is all he wants to do. And he doesn't realize that for some people, it's a lot of work. So he just loves it... And I would like to call him an equal and teammate. But really, I am just the slow end of things. Like he's the smart and I'm the dumb slow one... I am there to make sure he doesn't kill himself or run off and chase deer through the woods and stuff like that. I don't honestly know if he feels obligated to do anything for me. Really, because he's so strange. He's such a strange dog. And... his mom was a working dog and his dad was a working dog and his brother is a working dog. So he’s very, very work oriented. And if he could live without me, I think he would. He's just that self-sufficient, basically. Like if he could open his food thing, and get the perfect amount and not make himself sick, and if he could take his medicine, he would do all of these things fine. So I feel obligated to just love on him. And he's like, 'Mom, please. Come on'. He’s very self-sufficient. I’m just there to drive him around and let him out of his kennel. (Samantha, K-9 handler)*

Similarly, a handler from another team referred to the common refrain that handlers should stay out of their dog’s way and “let the dog work” rather than attempt to micromanage a search effort.
I don't have to put Cooper where I think he should be, he will tell me where he thinks he should be. And he'll ignore me if he thinks I'm wrong. If he's in human scent, and I can't see him and I try to call him back, he will ignore me 100%. It's like I am the stupid human. I don't know what I'm talking about. At that point, I just stop and stay still and just wait for him to figure out whatever he needs to figure out... He's just another volunteer out there doing a job for the pay that he's getting. I'm getting the self satisfaction of helping out; he's getting a toy. But I take his contribution into consideration when I'm working on tasks. If I see him going in a specific area that's maybe not in my sector, I stop and we sit there and we think, ‘Okay, how do we want to proceed with this?’ Or if he has no interest at all in an area that law enforcement tells me ‘Oh, we definitely think he's here’ but my dog has no interest... I have to take that into consideration. I don't care what you think. If the dog says 'No', I'm trusting the dog more. Because he has a better nose than I do. (Jessica, K-9 handler)

The relationship, as described by these handlers, is based on the recognition that the dog’s abilities far exceed those of the human’s as it relates to the performance of the job task at hand. They are both needed to accomplish it, but the dog is considered to be the more competent partner in some ways. The handlers regarded their function as mainly a supportive role - providing basic direction and, occasionally, emotional support.

**Affect and the Human/Non-human Animal Relationship in Disaster Settings**

As noted above, recent examinations of domestication have critiqued the traditional portrayal of domestication as a process in which humans turn ‘nature’, which is separate from the human, into property for human use. Aside from being a narrative that simply ignores the substantial entanglement of human social and political worlds in relations with other-than-human species, it has been used to prop up harmful social formations such as racial hierarchies, patriarchal family structures, and colonizing projects in addition to problematic human-non-human animal relations (Swanson, Lien & Ween 2018) Instead, multispecies studies have attempted to take a more relational approach. For instance, Cassidy & Mullin reframe domestication as an 'ongoing and unruly relationship' (Cassidy & Mullin 2007). These types of
multispecies re-framings have been applied in interventions intended to call attention to problematic treatment of domesticated animals that are bred for food and to blur boundaries between human and non-human beings that are considered “wild” or “other” according to the domestication as domination narrative.

The domestic canine, however, fits neither of those categories. Rather, the sociological and ethnographic literature has identified a shift toward recognizing the human-domestic pet relationship as bordering specifically on the familial. As discussed in Chapter One, Laurent-Simpson (2017) and Hansen (2013) examine human and domestic canine attachment as parent-child and “fuzzy family” members. Given that most search and rescue teams are volunteers working with a pet, I suggest that the affective aspects of this “familial” relationship are bound to impact the relationship even if the canine is considered a “working dog”.

Post-disaster research on psychological and physical health of SAR participants has similarly focused on the human-dog relationship as a particularly important factor in human and canine health. Hunt et al. (2012) report that SAR handlers, compared to other emergency workers, are at lower risk for symptoms of psychological distress, hypothesizing that their close relationship with the dog may confer some protection and increased resilience. Further they suggest that the relationship is bidirectional, meaning that physical illness or death of the dog was correlated with depression symptoms in handlers, and depression and PTSD symptoms in handlers were correlated with behavior problems in dogs. Similarly, Wojtas et al. (2020) studied salivary stress cortisol levels in disaster SAR dogs and handlers performing stressful mission readiness tests and found a correlation between increases in handler and dog stress levels that suggested the dogs were prone to mirroring the reactions of handlers, with particularly pronounced effects in the case of female-female dog-handler pairings.
Additionally, popular concern for the welfare of domestic pets affected by disasters has led to successful challenges of existing legal policy and standard operating procedures. Qualitative studies of Japan’s 3.11 disaster have revealed a desire for public safety measures that more adequately take into account domestic pets during evacuation and relocation procedures, while the Japanese government has devoted funding for increased recruitment, training and research to expand the scope and capabilities of community-based volunteers working with domestic pets in SAR operations (Kajiwara 2016). In addition to recent alterations in disaster response and recovery procedures in the United States and Japan noted in Chapter 1, similar changes were recently enacted in United States military policy regarding the treatment and evacuation of injured military working dogs in response to complex affective links between handlers and dogs in combat settings, among other concerns (Adelman 2019, Department of the Army 2005).

These developments highlight the appropriateness of a multi-species ethnographic approach to the study of the state and its cooperative engagement with citizens and further suggest that affect is an important conceptual tool for attending to the everyday engagements between humans and other animals who engage collectively in “world making” (Tsing 2015; Haraway 2016; Kohn 2013). This sentiment is reflected in the statements of K-9 SAR handlers represented in this ethnography who tended to resolve conflicts of values or responsibilities by favoring an affective, rather than instrumental, approach to the dog-handler relationship and prioritizing it over competing interests, including those of the state.

**Selecting a Rewarding Volunteer Opportunity for The Dog**

It will probably come as no surprise to anyone that volunteer canine handlers love dogs. When asked, the main reason most people gave for volunteering was that they liked or loved
dogs. Note that the reason was not that they hoped to fulfill an ideal of a good citizen; it was, first and foremost, about the dogs. That is not to say that volunteerism or contributing to the greater good were of no importance to these participants - several people did mention those motivations, as well. But there are plenty of ways to give back to the community without going to the trouble and expense of moving in with several large, energetic dogs that need continuous training and care that includes camping in the wilderness and hiding under piles of garbage on a regular basis.

Instead, people provided explanations that revolved around the relationship to the dog. And at times, when talking about their reasons for being involved, interview participants expressed hesitation to reveal this as their reason, suggesting that it did not match what they imagined to be the “right” narrative.

When explaining what she finds rewarding about participating in SAR, one handler admitted, after a pause:

Honesty, it sounds bad but... I'm in it for the dogs. Our team unit manager was like, 'you know, there are people out there that just want something to do with their dogs, and they shouldn't be on the team'. Well, he's old school. So he's a little tough and rough around the edges. But this is something that I like... I get to let him [her search dog, Toby] just run through the woods and it's the best time. And that brings me joy. It's hard for me. I have a connective tissue disorder, so I'm tired all the time, and my joints hurt. So that's a struggle for me. But it's so worth it. It's always so worth it to get to do that and see him work and it's just so fun." (Samantha, K-9 handler)

In other cases, handlers expressed that while they did consider a desire to contribute to a social need as their main reason for getting involved in SAR volunteer work, they only found out about this particular way to contribute because they had specifically sought out an opportunity to volunteer with their dog. For example, one Japanese handler told me that he had transitioned
from participating in dog training competitions for sport (e.g. Schutzhund competitions) into training for search and rescue because it was a way to participate in something that was more than just a hobby and actually filled a need. And multiple handlers reported that they had sought out search and rescue volunteer opportunities on behalf of their dog who needed a career change as a result of learning that they were unsuited to a different role for which they had been training (e.g. service dog or guide dog). In each of these cases the relationship to the dog pre-existed and may have superseded their commitment to the volunteer group in general. One Japanese handler explained, “The best thing about canine search and rescue is that you can contribute to society with your favorite dog.” He added, “The bad part is that it can put your dog at risk”.

The SAR Dog as Partner

Reflecting the sensitivity to relational differences and humility referenced earlier, most SAR handlers eschewed the idea of relating to their dog as if the dog were a type of tool or equipment that was merely instrumental to a task and possibly disposable. Rather, their engagements were described as complex and relationally focused, indicating some flexibility in relating to non-human others. However, it is not uncommon for technical, veterinary, or policy manuals refer to SAR canines as “tools” or “equipment” (Bäckström and Christoffersson 2006). This is perhaps a holdover from older policies of military and law enforcement organizations toward working dogs who were not regarded as family members and were kept in isolation in kennels and not necessarily assigned a dedicated partner nor allowed to “retire” to a pet home after their ability to work declined with age. Several participants from Japan, Europe, and the US commented about their negative opinions of this treatment of animals - which remains in place on some government-operated canine teams - regarding it as both cruel and ineffective, partly
because it usually goes along with abusive dominance-based training practices that are not as popular anymore and partly because it does not treat the dogs as the social beings that they are.

By far the most common title that SAR handlers assigned to their search dog, if pressed to select one, was “partner”, and sometimes “teammate”. This was true across cultural contexts, in Japan, Europe, and the United States. Some reasons handlers gave for this were that dogs think and contribute to the work of the team in ways that tools cannot, perform emotional labor in addition to searching, and are regarded as irreplaceable family members (but not necessarily ‘children’). The depth of the emotional connection between handlers and their canine partners was expressed particularly strongly when handlers spoke about the possibility of the dog being injured or killed while working.

Fig. 2.4 An Instagram post from a SAR K9 handling account shared with me by a participant after our interview, illustrating her comments about the SAR dog as a partner.
Tools Can’t Think on Their Own

In his study of the relationship between K-9 officers and patrol dogs, Clinton Sanders (2006) identifies the ambivalence in officers’ relationship to the patrol dog, unable to decisively commit to classifying the dog as a law enforcement tool or a sentient companion and family member. Sanders argues that this discontinuity was exacerbated by a training process and selection of dogs that was internally incoherent: simultaneously valuing aggressiveness and machine-like obedience from the dog while admonishing the officers to develop a relationship with the animal based on mutual respect which ultimately led to the officers’ ambivalent attitude toward and inability to reliably predict the behavior of the police K-9s (Sanders 2006). This may reflect a broader dominance-based organizational culture, which will be discussed in Chapter 3.

In contrast, participants in volunteer SAR teams frequently rejected the use of language classifying SAR dogs as objects to be used (i.e. “tool” or “equipment”) rather than related to as individuals, on the basis that the SAR dog is an agent with independent thought and influence over the course of the activity. Although the handlers are obviously “in charge” in the sense that they are giving commands, the relationship is at the same time difficult to describe as one between un-equals because the dog’s abilities so far exceed those of the humans in terms of ability to accomplish the job tasks:

*My dog is also a family member. He’s another volunteer. I don't think he thinks of it as a job for him. For him, it is just a game. He just has to play it at 2am in the morning. I guess you could call him another tool. But I don’t really like that phrasing. A tool is something that can't think on its own. (Jessica, K9 handler)*

For some participants, it was only acceptable to think of the dog as a “tool” if humans were labeled the same way. If the dog is a tool, then so is the human. This puts both on the same
level but does not attempt to claim an elevated status for the animal. In other words, it is not a matter of elevating the dog but of being humble as a human, reflecting the perspectives of de Waal and Fuentes, noted above.

I would say it’s a partnership. I think of tools like having a GPS, trekking stick, maps. You need to train to learn how to use those, but the tool itself is static. The GPS is the same each time. To me, the dog is partnership, the dog adjusts to every new environment, new scents, and you have to communicate properly to do the job (for example a handler missing an alert or the dog not alerting correctly). I don’t think it’s entirely wrong to call the dog a tool in the sense of using all these tools to do SAR - trained humans, trained dogs, drones, GPS. So I think it would also depend on the definition of “tool”. (Amy, K9 handler)

“Dog Therapy”

Others used relational language to explain that the dog performs labor beyond what is required of the search function, including emotional labor that typically is not described as one-sided. In some cases it is couched in familial terms but in others the dog is not described as a surrogate for a particular human relation (i.e. child) but as a partner in a unique relationship that could not necessarily exist between two humans. Kim’s dog, Tucker, is certified as a therapy dog in addition to being a search and rescue dog, and he accompanies her to her day job:

He's a pet. I mean, he's a working dog in that he goes to work with me. So he, you know, I got my briefcase, I put on my work clothes and get my briefcase and he knows he's going off to the office. But, how I feel about him is he's my buddy. And he's my pet. And we're super connected. And I guess that's our working relationship. When I leave, Mark says he will sit by the back door and stare at the door for two hours straight. I mean that's how connected he is to me. But do I see him as a pet? I do. I mean, he goes on walks with me every morning, although some of that's our conditioning to be doing that in the heat so that he's out in the heat and so he stays in shape, because we don't run every day. I don't leave him out in a pen. He's in the house with me. He sleeps in the room with us. He sometimes sits in this chair on me...I see him more as we’re a team and we’re equal., so I would not see him as equipment, I would see him more as just as valuable or more so than me. That he's the worker. I'm reading him. He can't function without me. And I can't
function without him. right? So I see us as equal. And we're a working team. And almost like more he's a person than a piece of equipment. is how I would see him. We have our equipment. We have our harness and our bell and our GPS collar and we have our equipment, but I really see him more as a person. (Kim, K9 handler)

One experienced handler provided descriptions of several occasions when her dog appeared to spontaneously recognize distress and offer emotional support to a victim, handler, or others.

We're out there, maybe spending the night and my dogs are very attached to me, and all they want to do is work, but at night I've watched them go from person to person and if the person shows they want to give them attention, they plopped down by him. And, you know, let them give them attention. And then they will go to the next person... And I've seen my dogs gravitate towards subjects that I found that are in distress, especially young children.

We all process stress and grief, and anger differently. And some people don't want to interact when they're stressed out or upset. I'm one of those. I'm really great at giving support. But I don't want that support when I feel that way. I want to be left alone. And you know, my dogs, are about the only thing I want around me when I am about to have a breakdown. I don't want anyone else around me. (Donna, K9 handler)

This phenomenon was mentioned by several participants including Yoshida-san, an administrator of an NGO that deploys disaster SAR teams internationally, who had a name for it: “dog therapy”. He explained that during operations, people become stressed and exhausted. Simple acts like communicating with and being around the dogs or taking pictures of and touching them helps operators and other support personnel during missions where they are encountering a lot of victims or other stressful conditions. He described it as an attempt by the dogs to make communication easier between team members and to reduce stress.

Irreplaceable Tools

Regarding a medical problem that surfaced early on after taking on a new SAR dog, I asked handler Rachel what would have happened if it had turned out that he could not work after all:
I would have had to keep him because I love the dog. I mean, there are people that can just think ‘this is a working dog, and it's not working out for me. It's not doing what I need’. And I think they just have that mentality from the get go. And I don't know if they just forced themselves to not get emotionally attached, but I don't have that ability.

(Rachel, K9 handler)

This describes an affect-based relationship that goes beyond the dog’s functioning as a SAR dog. They are working dogs but retain the basic status as (beloved) pet even if they can no longer work. This suggests that the dog’s status as pet supersedes their responsibility as worker and could not be revoked if the SAR arrangement was dissolved (but this is recognized as one of multiple options). Another handler elaborated:

I consider him a teammate, for sure. I think all of them are. Most of the handlers I know that had to retire dogs brought their dog to be home with them and retire. You wouldn't do that if you had a worn-out pistol. You just turn it in and get a new one. These dogs...he's a pet, too. So he's part of the family. I can't even imagine looking at him like he's replaceable. (Michelle, K9 handler)

Within the “fuzzy family” body of literature suggested by Hansen and the shift toward a more relational orientation toward the non-human animal in many social settings, studies pointing out inequity and imbalance (almost always in favor the human) in these relations abound (Serpell 1996; Herzog, 2002; Robinson, 2019). Studies of the human-animal bond among pets have identified a shift toward deriving emotional services from non-human animals in one-sided and exploitative transactions. Shir-Vertesh describes the ambiguities of the human-animal relationship in families in Israel as a type of “flexible personhood” wherein, despite the disapproval of developing emotional bonds with animals under Judaism, some families - especially young couples - incorporate pets into their household and treat them in many ways as children and as providers of emotional services. Except the bonds were not permanent and could be terminated at any time, which would result in the pet’s “personhood” status being revoked (Shir-Vertesh 2012). In the same vein, Amanda Robinson’s ethnography of “cat cafes” in Japan
describes an “affect economy” in which a human-animal relationship is commodified and marketized in response to social alienation and economic change (Robinson 2019).

I argue that this framing of the imbalance in the family-like relationship does not work as well in the case of the search and rescue dog even though they are often family pets in addition to working dogs. Based on these participants’ responses, the dogs are not serving as surrogates for anything - they already have a job, they do not need to carve out a new one to fit into the family structure. This is consistent with Laurent-Simpson’s (2017) conception of the surrogate family role as a shift that occurred relatively recently as family pets no longer had other jobs, perhaps prompting their labor to be shifted primarily into the affective realm.

However, not all handlers identified the SAR canine as a pet or family member first, and working dog second. There were some handlers who used the term “tool” to describe their SAR dogs, emphasizing that their main function is to perform a job. Handlers who expressed this opinion tended to be those with prior military or law enforcement training in canine handling, who also tended to be male14. These handlers almost invariably took care to qualify the statement by framing it in terms of the dog’s ability to perform a task (as opposed to being “used”) and then recognizing aspects of the dog that would similarly apply to human partners, though. Even when relegating the dog to the status of ‘almost equipment’, participants were quick to acknowledge the dog’s happiness, well-being, or agency - things that would not often be considered when one is describing, say, a hammer:

_I know you've heard this - they say ‘it’s your canine partner’. I know you've heard that probably to death. Maybe it's the military side of it but I kind of back off a little bit from that. Because it's up to me to put her in the correct position or correct place to be able to function correctly. As a partner, she would be able to do that on her own. No, it's up to me_

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14 The gender disparity in public safety professions as it relates to canine handling will be further explored in Chapter 3.
to get her there. Don’t get me wrong, she's treated great… but it does come down much more, I think, to almost an equipment view but a little bit in between, because I have to get her to the correct criteria for her to be able to function correctly. That is much more like equipment. Equipment is a bad word… But then on that side, too, it puts much more responsibility on my part, to make sure everything works appropriately and efficiently… Because if she's not up for working, she's not going to do it. No matter if I put her, you know, five feet from the person. So that's the ethical part. And then the other part of it is, she's not going to get a find if I put her in the totally wrong vector and we end up 20 miles from the person… She's kind of in between, doesn't fit into either equipment or partner. I don't know what the term would be. (John, K9 handler for civilian and military teams)

He is a tool. And I have called him that. Because that is his purpose: to work. But I am not going to put him in a position where - I can't say where he is going to be harmed, because you can't know that. He's certainly been in in areas that he could have been injured. But I'm not going to throw him into something that there is a very, very likely chance that something's going to happen to him. I've spent - and it's not just my emotional attachment to him – I’ve spent a lot of time and effort getting this dog to where he is. He's not disposable. I respect the fact he is a living being and he is an independent thinker. He's doing this because this is his job, and this is what he loves to do. And I enjoy doing it with him. I love watching him work, helping him figure things out and the way that he interacts with me most of the time.” (Rachel, K9 handler)

These narratives show some of the ambivalence and competing allegiances between the so-called domestication narrative and the pet as family member/child narrative noted by Sanders, but this seemed to be more of a linguistic issue than the kind of role conflict Sanders observed. It may be that the attempt to fit dogs into existing human-made roles (child, family, equipment etc.) is another example of an unhelpful anthropomorphizing of the dogs - not unhelpful because they cannot necessarily be described as something like a family member or a teammate or an object. They may at times approximate multiple human roles in their relationships to their handlers, but they do not seem to fit exactly into any of them, either. They cannot be reduced to “just” one of those things any more than a human could be. The relationships are complex in a way that defies simplistic categorization.
Feelings Trump Policy

This affective nature of the relationship as opposed to official policies regarding the dog as equipment to be used for the preservation of human life was particularly noticeable in instances when the dog was exposed to danger or suffered serious injury, sometimes resulting in unexpected handler responses. Brandon, an experienced canine handler and administrator of a national SAR organization in the US who has worked with disaster teams, notes the conflict that sometimes arises from these competing perceptions of dogs as tools versus beloved companions. He explained that, as noted earlier, one of the main reasons for including dogs on disaster search teams is that they can work on unstable rubble piles and enter areas that are either too difficult or too dangerous for human rescuers to access. In fact, they are intended to prevent firefighters and other search personnel from being exposed to the danger of going onto unstable rubble whenever possible. But most of the time, task force members and their canines are not responding to dangerous large-scale disasters—they are working, training, and living together, developing close bonds of affection. And everyone “falls in love with” the station dog. Brandon described how this can result in undesirable handler action toward dogs in situations in which the dog is intended by agency policy to be used to reduce the risk of injury to human handlers:

*This is the unaddressed elephant in the room. I don’t know that agencies sit down in advance and have that conversation with the fire fighters or the responders and say: ‘Look the dog is a tool, we love the dog, but if he gets in trouble on the rubble pile, we are not going to violate any safety hazards to get to him because he’s a dog and that’s how we’re using the dog’. If it’s a firefighter, we would pull out all the stops to save that human life. And the policy says ‘no we won’t do that for a canine’. But you and I both know that’s not what will really happen. They will probably take MORE risks trying to get to that canine. If my dog all of the sudden fell through a hole, unless somebody had a physical hold of me it would take them 3 minutes to catch up to me because I’d be all over that shit. It’s a sentient tool and we become very, very attached to them.*
Amy, a handler for a volunteer team, elaborated a similar sentiment. She described an incident in which her dog, Max, was seriously injured during training. While training to become mission-certified, Amy and Max were working on searching in a multi-story parking structure and Max fell six stories onto the ground below:

*Nothing would have stopped me {getting to Max after he fell}. The way he fell, I almost jumped off the building after him. I was thinking this is an emergency and how can I get there fastest? I would jump. Not in a suicidal way. Of course, that is suicidal. But I needed to get to him as fast as possible. And I was so concerned about that, I was less concerned about my safety."

Incidentally, Max survived the fall and later recovered and passed his mission readiness test, minus a few teeth. Amy took away from the incident a perspective on handlers’ responsibility to advocate for their dogs and ensure that they are not exposed to unnecessary danger, even if it means going against standard practices:

*There’s a risk in SAR and we say, “Oh, well, you can send the dog in”. But what are you sending the dog into and are you prepared that it may take five people or ten people to get the dog? And I think sometimes that's what we forget is that there's going to be a risk of the dog dying, but what about the risk of the dog being injured and then being retired and it was because you set up a bad search or a bad practice. So I think that's where the handler has to always advocate for their dogs and know their limits.*
Fig 2.5 Amy and Max relax after a training exercise developing skills climbing stairs on the exterior of a building

Discussion

While the SAR dog-handler relationship exists in the context of conflicting roles and statuses as well as imbalances in power and perceptual and communicative abilities, SAR teams do not dissolve under the weight of those inconsistencies. Following Hansen (2013), I illustrate that despite the limitation of humans to their own experiences, this does not preclude the possibility of developing affective - and effective - bonds with non-human others. And while some relationships may indeed be exploitative and imbalanced, this does not inevitably lead to objectification (Ingold 2000). Rather, the SAR team operates in a way that reflects Haraway’s framing of domestication as an "emergent process of co-habiting, involving agencies of many sorts and stories that do not lend themselves…to an assured outcome for anybody" (Haraway 2003, p.30). The handler narratives described above suggest that the SAR dogs made themselves
indispensable to their teammates and to their individual handlers, so that even if a policy regarded them as “less than human” or expendable, handlers were not likely to act in accordance with that. The next chapter will further examine the concept of advocacy mentioned by Amy as it is practiced by dogs and handlers toward their partners.
September 1 is Disaster Prevention Day in Japan. Every year, Gunma prefecture marks the occasion by giving an elaborate public demonstration in which agencies such as the Self Defense Forces, police and fire services, Hazmat teams, and anti-terrorism units demonstrate their capabilities in a disaster response demonstration attended by local government officials and the general public. All of the latest equipment is brought out for an impressive display, including helicopters, fire engines, and military vehicles, which are displayed in a separate area for attendees to admire after the demonstration is over. At the 2019 demonstration, DRDN’s canine search and rescue team was also in attendance. They arrived early at the event location and began to warm up the dogs and survey their assigned portion of the “disaster area”, which consisted of a few makeshift buildings and a wrecked vehicle placed among scattered debris and piles of disturbed earth. Inspirational music from what sounded like the musical score of a movie played on a loop over the loud speakers set up near some bleachers. Even though this was only the dress rehearsal for the ‘real’ demonstration that would take place the following week, there were already scores of public officials and local citizens filing in to watch the proceedings.

In a little while, Kimura-san and Gracie, along with Nakamura-san and Oliver and Mori-san and Sadie, would demonstrate how they could quickly locate disaster victims trapped under rubble or inside of vehicles. Kimura-san was nervous about the performance. Nakamura
reminded us that this was only a demonstration, not real training; unlike in a real training or mission, the dog handlers already knew where the “victims” would be located and could cue the dogs to bark if necessary. The point was to demonstrate for people what the dogs are capable of and to show how they are an integral part of disaster preparedness efforts. But Kimura confided another concern: “The police and firefighters don’t think a woman can do it.” Almost all of the other participants were, indeed, men. But Gracie was one of the search and rescue dogs authorized to do public demonstrations, and Kimura was her handler. The same goes for Mori-San and Sadie. Search and rescue units operate as a team: the same handler and dog train and operate together. So, Kimura-san and Mori-san would be performing in the demonstration, whether the other emergency responders liked it or not.

**Public Safety as Masculinity Contest**

The above description of a public demonstration of a prefecture’s disaster preparedness capabilities are typical in Japan. I attended two such events with DRDN during the same week, in addition to several smaller public events organized to remind citizens of the ever-present threat of disaster as well as the procedures and resources in place to respond to them. The reminders were constant. Sayre’s study of the proliferation and simultaneous concealment of quotidian practices of disaster preparedness in Tokyo describes disaster preparedness preparations as so ubiquitous as to be an almost invisible part of everyday life for many Japanese (Sayre, 2011). This may be the case for many of the preparedness efforts citizens engage in, but in the case of public safety organizations, there tends to be an element of spectacle involved. As Nakamura noted, the events make no attempt to mimic actual operational conditions, opting instead to display the most spectacular equipment and capabilities available. At one point during the event, while the canine teams were searching for survivors in their assigned area, a police
team was conducting an investigation of vehicles in the same area while the fire department was spraying impressive amounts of water on it and the self-defense forces were digging one of the wrecked vehicles out from the sand it was covered in. In an actual event, all these functions would not take place simultaneously in the same location, but they make for a spectacular, dynamic presentation.

Ben -Ari and Frühstück (2003) describe a similar demonstration performed by Japan’s Self Defense Forces, which they describe as a ‘spectacularization of violence’ that reflects a “transnational military culture” in which military establishments mimic processes that take place in other countries’ military forces within a world system of the military profession. Ben-Ari and Frühstück analyze the event as an effort to seek legitimacy and public acceptance. It was simultaneously an aestheticization of violence in that it took place under controlled conditions for entertainment purposes, and a demonstration of a “warrior” image of military people, all of whom were male despite the heavy reliance of military recruitment strategies in other settings on showing female representation and using cute, feminine imagery to attract recruits (Ben-Ari & Frühstück 2003).

It is no wonder then that Kimura felt palpable discomfort at entering a space that was reserved for a demonstration of “masculine” prowess. Although two thirds of the canine SAR teams present that day were female, canine search and rescue teams generally operate within a structure of security and emergency services that tend to present themselves as a violent, masculine endeavor. Further, Berdahl et al. (2018) have applied the term “masculinity contest” to describe “toxic” organizational cultures, such as those prevalent in first responder organizations, including police and fire, that are pervaded by cultural norms that encourage men to prove themselves as masculine by engaging in behaviors characterized by “dominance” and eschewal
or devaluation of “feminine”-coded traits, which can lead to hostile work environments and harassment (Berhdahl et al. 2018).

Commenting on her experience providing training and advice to search and rescue teams worldwide, Anna noted the pervasiveness of this problem in search and rescue teams. In her experience, women are normally more involved than men in dog handling. But, she observes, “It is harder for them [women] to get to be team leaders in search and rescue because, compared to other dog handling disciplines like agility, search and rescue is an emergency service and so men act like women cannot do it”.

This chapter examines the prevalence of female handlers in canine search and rescue, the tensions this creates when working with other predominantly male public safety services, and the strategies handlers employ to justify their belonging. I also explore intersections of barriers and stereotypes affecting female humans and female dogs, including derogatory terminology, training protocols and equipment that reflect an assumption of male bodies as the standard, and a tendency to equate female issues with “reproductive” issues. Focusing on the culturally constructed nature of performances of gender (Butler 1988) as they relate to performances of security and the development of “queer multi species bonds” (Irni 2020), I argue that through mutual participation in voluntary SAR organizations as a multispecies team, female handlers and dogs advocate for one another’s fuller inclusion in the public sphere and, in so doing, reveal inherent flaws in the androcentric biases prevalent in public safety services.

Butler (1988) describes gender as constituted through repeated performative acts compelled by social sanction and which tend to enforce conformity to hegemonic, heterosexual standards. Perhaps not unlike one’s sense of security or preparedness for disaster, it only becomes real to the extent that it is repeatedly performed. Recognizing Lamphere’s (2005)
classic critique of the misperception that women in all places face similar forms of oppression and exclusion from the ‘public sphere’, I do not argue that “masculinity” and “femininity” are understood in exactly the same way by all people in public safety organizations worldwide. However, I do outline some of the common experiences that female participants encountered and the ways in which those were co-constituted with those experienced by their canine partners.

The experiences and narratives presented in this chapter were selected to represent the major themes identified during analysis of data collected during the course of this study. It is important to note that the experiences described herein are not intended to represent the experiences of all people involved in canine SAR, nor even all people in this study. Besides working in different geographic locations, many of the handlers worked in different SAR organizations with their own unique organizational cultures and operating procedures. When I refer to “masculinity” in this chapter, I am referring to culturally constructed and idealized notions as they relate to the performance of public safety jobs (i.e. Police, fire, rescue etc.), usually emphasizing traits such as dominance, competition, and control (Panter 2015; Ainsworth et al. 2014; Britton 2000; Cooper 1995; Tracy and Scott 2006), noting that gendered identities are historically situated and fluid, and that hegemonic masculinities are not monolithic (Broughton and Walton 2006; Connell, R.W. and Messerschmidt 2005). That said, canine search and rescue operators in all contexts examined in this study do substantially similar work and, accordingly, some similar experiences were discussed by participants across cultural contexts. I describe how such experiences may impact volunteers in a field that tends to privilege people with male bodies and to associate female bodies with reproductive functions which are, at the very least, considered a deviation from the professional standard.
Demographics

In every context in which I interacted with SAR teams, the presence of a relatively large proportion of female handlers, trainers, administrators, support personnel, or organizational leaders was commented on by participants. Women make up 50 percent of the membership of DRDN and are represented on the organization’s Board of Directors. The leadership and training partners from the European team with which DRDN had a close training relationship were entirely represented by women. Similarly, the membership breakdown of the team in the United States with which I volunteered was 63 percent female (19 of 30 members). A director of a national search and rescue organization who I interviewed in the United States estimated that, at one point, of the approximately 300 wilderness canine handlers on teams in his state, roughly 275 were female. One male handler in the United States remarked that he was “exceptionally surprised” by the number of women involved in the profession, noting that his team had currently reached almost 50 percent men, which was an unusually high proportion in his experience. In fact, several participants wanted to know whether this was a trend I had noticed about teams operating in other regions or countries besides their own. I understood this to be a trend that was regarded as something of a curiosity because it contrasts sharply with the proportion of females employed as first responders more broadly.

It is common to find more male canine handlers on disaster response teams and task forces (such as those from FEMA in the United States or JICA in Japan) that are staffed by career fire department, law enforcement or military personnel rather than civilian volunteers - probably because these organizations tend to employ higher proportions of males to begin with. In the United States, for instance, females comprise only 8% of firefighters, 26.7% of law enforcement officers, 21% of paramedics or EMTs, and 20% of military personnel according to
official statistics in 2018, with slightly higher proportions of females reported in volunteer or administrative roles within those organizations (Evarts & Stein 2020, FBI 2018, National Fire Protection Association 2020). In Japan, the percentages of females performing those services are even lower, despite efforts to increase female participation in the workforce in these professions. A 2015 estimate from Japan’s Fire and Disaster Management Agency put the proportion of female firefighters at a mere 2.4%, compared to 8.1% for police and 5.7% for the Self-Defense Forces (Japan Times, 2015). However, among volunteer canine search and rescue teams, the ratio is practically reversed. The proportion of women participating in canine search and rescue is dramatically higher than their representation in other public safety and emergency services jobs. Certainly, conditions differ regionally and the barriers faced by people seeking employment in these fields vary, but it is safe to describe public safety in general as a male-dominated field, with some exceptions such as canine search and rescue.

**Physically Strenuous Work**

Search and rescue operations are regarded as physically demanding, for both human and canine participants. Because of the strenuous nature of the work, SAR dogs are not normally expected to work long after around 8 years of age (Bryson 1984). Some participants were able to continue working with their dogs slightly longer than this, but it was regarded by most participants as more or less a standard average retirement age. There was no mention of sex difference in this regard. In any case, search and rescue dogs are regarded as athletes and it is common for SAR teams to have physical fitness guidelines for handlers and dogs. Handlers usually engage in rigorous exercise programs for their dogs ranging from regular walks of several miles most days of the week to organized physical fitness assessments and foundational fitness plans.
Fig 3.1 Illustration from published veterinary article about the “Fit to Work” canine physical fitness program described by one participant, demonstrating proper technique for the dog squat. (Farr et al. 2020)

In a classic manual in the search and rescue community, Search Dog Training (1984), Sandy Bryson provides a detailed guide to selecting a dog that will be suitable for SAR work. Numerous factors such as breed, lineage, age, temperament, past experiences, socialization, receptivity to training, and even emotional attachment to handler are taken into account. The assessment ends with a brief note on sex of the dog, almost an afterthought:

“Male or female? You choose, keeping in mind that male Shepherds run 90 pounds or over with generally large bone structure. Females run about a third smaller. Bigger in search is not

\[15\] This manual dealt primarily with German Shepherd Dogs, although other breeds have also become popular in SAR work in recent years. Breed selection will be discussed in Chapter 4.
necessarily better - some fast agile females can outmaneuver the males. Properly trained, neither sex will tire before you do.” (Bryson 1984).

Note that this description not only omits any mention of perceived behavioral or cognitive differences between sexes of dog, it also posits that 1) smaller size may be advantageous in certain conditions and 2) any differences in fitness or physical capability would be largely irrelevant since proper training would result in both male and female dogs achieving a minimum standard well above that which is necessary to physically perform the expected job tasks. I will return later in this chapter to a discussion of veterinary literature regarding sex differences of dogs in terms of reproductive health, as this is one topic about which several handlers expressed strong opinions.

In contrast, considerations of physical fitness requirements for humans engaging in public safety jobs are notorious for being anything but gender neutral. In her study of Japan’s Self Defense Forces, Frühstück notes that the difficulty of integrating women into armed forces once positions are legally opened is a struggle facing militaries around the world, even in forces such as Japan’s, which are not actively engaged in combat missions. One reason consistently given for this difficulty is the perceived transgression of the normative ideal gender type which supposes women’s “physical and mental nature” to be in conflict with the demands of such professions, usually framing women as physically and psychologically ‘weak’ compared to male peers (Frühstück 2007). Considering the search dog manual above, which describes expected sex differences between dogs (such as size) as differences that may vary individually within a broad range, as potentially advantageous, and not substantial enough to suggest any inherent inability since proper training would allow most individuals to meet a basic minimum standard regardless, it is curious that discussions regarding sex and gender differences in their human partners are framed as questions of “ideal types”.
Indeed, in the United States, fitness assessments for law enforcement and military personnel sometimes seem designed to test maleness rather than actual job-related fitness and have been repeatedly and successfully challenged in court on the basis that they unfairly exclude women as they do not test the ability to perform actual physical tasks required by the job (Birzer and Craig 1996; Pellerin 2015). Similarly, qualitative studies of female firefighters have consistently found that barriers such as ill-fitting equipment (designed to fit male bodies), poorly designed training methodologies, and discrimination or harassment - not necessarily inherent physical inability - contribute to injury and poor fitness and job performance outcomes (Ainsworth 2014; Hollerbach et al. 2019; Sinden et al. 2013) These studies demonstrate that problems for female first responders related to physical ability, in many cases, arise from an unexamined bias in organizations in which the male body is considered to be the “standard” and deviation from that standard is coded as un-fitness for the job. On paper, they are open to women (but not necessarily to people of all gender identities) but in practice penalize them for not being men.

Assumption of a Male Standard in Search and Rescue Discourse

Despite the high representation of women in search and rescue, the tendency to reproduce the assumption of male bodies as the “standard” was present in written literature, including scientific articles and operational manuals that I encountered during my research. In the following examples, female bodies are erased, referred to as medical anomalies or reduced to their biological/reproductive functions. In the United States, the National Association for Search and Rescue (NASAR) provides certification and training standards for a number of SAR personnel in participating states and organizations. The NASAR training manual presents the fundamentals of Search and Rescue and
is required for certification of SAR personnel and outlines physical fitness standards, which are prescribed for all personnel irrespective of sex (Cooper 2005). However, the chapter on “Survival and Improvisation” ends with a “Special Considerations” section that contains only one subheading: “Special Considerations for Women”. It is devoted almost entirely to managing embarrassment about women’s reproductive issues that could arise while in the field. It states that personal physical problems and relevant health information should be communicated to SAR team members and that “responsible leadership includes the ability to deal with problems appropriately and without exaggeration”, including situations unique to women (Cooper 2005, p. 83). The manual proceeds to identify and describe those personal physical problems as: developing stress-induced amenorrhea (which is described as both potentially “troubling” and “a welcome relief”); recognizing menstrual cramps (the manual suggests that most women should be able to diagnose this themselves without help from the team leader); vaginal infections which should be prevented by encouraging women “to wash regularly, wear loose-fitting cotton underpants, drink excess water, and when possible, keep their sugar and carbohydrate intake down”; possible complications related to the use of oral contraception or intrauterine devices; pregnancy; anemia; proper disposal of menstrual products, and finally, the dangers of wearing jewelry. It is noted that this last consideration is not only for women (“SAR personnel should give serious consideration to removing all jewelry before becoming involved in field operations”) but is nevertheless included under the section heading “Special Considerations for Women”.

While this section is undoubtedly included in an attempt to helpfully address issues that may face female SAR operators and make it easier for them to participate, those issues are rather unhelpfully framed as “personal health” problems steeped in cultural assumptions about
menstruation. It reinforces the idea that the standard search and rescue operator is male, and that any considerations that affect non-male people are “special” considerations requiring additional forbearance and understanding. No mention is made of special considerations related to male anatomy, contraceptive practices, or medical conditions to which men are disproportionately prone. Note this is not a criticism of NASAR specifically, as the information contained in the manual is compiled from other sources including military handbooks and survival and outdoors books published for general audiences and thus is likely a reflection of the zeitgeist permeating the field. It is included here to call attention to the portrayal of female personnel as defined by biological reproductive capacity and by framing those processes as liabilities and health problems that uniquely affect women as a homogenous group, narratives which have been associated with women’s exclusion from participation in public life (Martin 1987; Lock and Kaufert 2001).

Buckley and Gottlieb’s classic anthropology of menstruation, *Blood Magic* (1988), highlighted the social and political importance of beliefs about menstruation which affect everyday life but are experienced in various and multivalent ways in different social contexts. The authors critique the medicalization of menstruation and its framing as a universally negative female attribute, narratives which are even more problematic when they do not derive from female perspectives nor recognize the diversity of female experiences. The lack of any universal menstrual taboo or narrative suggests the cultural constructedness of beliefs about menstruation, which the authors note can be deployed in both patriarchal projects that disempower women as well as in expressions of feminine power and maneuvers for political advantage. This tension is illustrated in SAR handler narratives that depict females as simultaneously weaker or out of place in public safety jobs while also casting them as “dog moms” and caretakers of their canine
partners who are, in fact, essential to the job and can only contribute if their (typically female) handlers are also included.

The problem of androcentric and western medical bias in science as it relates to multispecies ethnography has been taken up by feminist anthropologists who have contributed to the development of the theoretical literature on human and non-human animal interactions in at least two significant ways. First, the focus on reviewing biological categories that presupposed the inferiority or subordination of women (such as menstruation as an inherent weakness) in second wave feminist theory challenged dominant conceptualizations of “nature” and “culture” and sought to re-examine the operation of power and agency in social relations between differentially situated actors (Ortner 1972, Brettell & Sargent, 2012). This developed into a sustained critique of male and Euro-centric studies of science which not only rested on androcentric assumptions but failed to acknowledge this lack of objectivity (Haraway 2003, Barad 2007, Freccero 2011). Donna Haraway’s concept of “naturecultures”, for instance, is an important product of this mode of inquiry.

The second key influence of feminist theory comes from the move toward intersectionality and the consideration of multiple intersecting positions and subjectivities within unequal power structures that affect individuals not just because of assigned categories of gender but also of class, race, and sexuality, leading to both scholarship and activism surrounding issues of civil and human rights (Davis & Craven 2016). Given the inherently unequal and exploitative nature of human interactions with nature and other species of animals, based in large part upon the same problematic nature/culture dualisms noted above, researchers and activists alike have sought to include the (flawed) concept of species in the list of “intersectional” categories.
Just as the concerns of second-wave feminism were later subjected to critique for their failure to encompass other important differences in the experience of unequal power relations related to positions within categories of not just gender but also class, race, sexuality, (dis)ability, socioeconomic status etc., some have argued for the use of alternative epistemologies to consider the position of species as yet another site of (often feminized or naturalized) unequal power relations deserving attention. This is a major contribution of studies which sought to understand how science and technology create unequal power through practices of defining and representing certain “actants” among a host of social and natural entities (Tsing 2015; Latour 2004, 2014; Callon et al. 1986; Ingold 2000, 2017). Feminist contributions to this line of theory have been vital, arguing that because of the bias in male dominated euro-centric science, the categories of “nature” and “culture” have been artificially constructed and the concept of sociality unjustly walled off from non-human species (Haraway 1988, 1991; Whatmore 2013).

Important theoretical considerations of companion species in the feminist anthropological literature have focused on familiar animal species, such as domestic dogs. Haraway’s *A Companion Species Manifesto: Dogs, People, and Significant Otherness* (2003), builds off of her earlier *Cyborg Manifesto* (1991) which attempted to replace anthropocentrism with relational links to human and non-human others with technological artifacts. In the cyborg, Haraway attempted to show breakdowns in the boundaries between supposedly distinct categories such as human and animal, living being and machine, and the physical and non-physical world with the cyborg as the metaphorical example of evolutionary and technological developments illustrating the blurring of those boundaries. Notably, this essay also served as a critique of divisive feminist perspectives that relied on essentialism and dogma. In the subsequent *Companion Species Manifesto* (2003), Haraway argued that companion species, specifically the domestic dog, serve
as a better analytical tool for examining the blurring of such boundaries. Building also on her earlier work “Situated Knowledges” (1988), in which she explored the “lively knotting” of human and nonhuman animals in contact zones such as laboratories, farms, and dog shows that produce more-than-human encounters of “intra-action”, Haraway set out to develop an ethics and politics of “significant otherness” from her reflection on human-dog relations and concluded that history matters in “naturecultures”. “Natureculture” is a term used to denote the idea that nature and culture are tightly interwoven and cannot in fact be separated into distinct domains as has been the tradition in some circles of Western scientific thought, given that they are both biophysically and socially formed (Haraway 2003, Fuentes 2010). For instance, Haraway argues that humans and dogs are partners in co-evolution (rather than conceiving of domestication as a biological fact in canines and a social process in humans) and that the interaction has also produced biological impacts on humans and social changes in dogs.

Subsequent studies of the human-dog relationship have been heavily informed by Haraway’s reflections. For instance, Weaver has applied Haraway’s approach to studies of dog training, showing that differences in training approaches based on dominance versus positive reinforcement reflect differences in the conceptualization of the basis of the human-dog relationship with older dominance-based approaches being rooted in the types of flawed androcentric conceptions of “nature” that Haraway criticized in her earlier critiques of primatology, whereas more contemporary moral-affect-based training protocols are informed by feminist perspectives (Weaver 2017). This difference in philosophical approach to training may be related to the tendency of handlers with military and law enforcement backgrounds to describe SAR canines as “equipment” or things to be used in Chapter 2.
Weaver also develops the concept of “interspecies intersectionalities” to describe how the relationships between humans and nonhuman animals “not only reflect but also shape experiences of gender, race, sexuality, class, nation, species, and breed” (Weaver 2017, p. 12). He notes several examples of an asserted connection between people of color and nonhuman animals being deployed as a tactic in race-related oppressions including the effect of “dog racism” as applied to breeds such as pit-bulls, which not only affects a certain category of dogs but also marks the humans with whom they are associated as “thugs” and produces a notion of white femininity as savior in the rescue of a dog that is so marked (Weaver 2017). Ogden points out that these intersectional sentiments are also reflected in the work of many other critics of post-colonial power relations. For instance Fanon and Kosek have also built on Haraway’s insights to demonstrate how animal representations and constructions of animality reveal complex negotiations of colonial, gendered, and racialized categories of difference (Ogden 2013, Fanon 2004, Kosek 2010). Thus ‘species’ is not an irrelevant social category, regardless of challenges to its scientific basis as a distinct and unique biological one. This literature on companion species, particularly when applied to considerations of subtle bias and inequality inherent in the human-animal interaction, suggests the importance of attending to parallels in the biases directed toward human and non-human subjects.

**Medicalizing the Reproductive Canine Body**

Female SAR dogs for their part, unfortunately, do not escape the effects of socially constructed menstrual narratives. Non-human animals are not normally considered to have gender (as opposed to sex), as gender is a construct based on social and historical processes. Furthermore, we cannot ask other species what they think and feel about gender roles and
identity, if anything. At best we can observe their behavior and make inferences.\textsuperscript{16} van Dooren, Kirksey & Munster (2016) define a multispecies approach as one that focuses on the “multitudes of lively agents that bring one another into being through entangled relations” (van Dooren Kirksey & Munster 2016, p. 3), a perspective illustrated in Parreñas’ (2018) discussion of mutual vulnerabilities among humans and orangutans and Weaver’s (2017) interspecies intersectionalities experienced by humans and dogs. Recall that in the opening vignette of Chapter 1, a handler mentioned preferring to work with female dogs because they are easier to train. In an attempt to include some limited consideration of the SAR dogs’ experiences despite my inability to interview them directly, I asked human participants to share their observations and experiences working with male and female dogs in the context of their work as part of a search and rescue team.

Handler perceptions and preferences about dog sex differences varied widely. Some handlers spoke at length about perceived differences between male and female dogs, suggesting distinct genders mirroring those of humans; others believed that no such differences existed or even suggested opposite traits. Some believed that handler-dog pairs worked best when they were different sexes; others believed the opposite. Some described female dogs as “soft”, “sensitive” and “easier to train”, whereas other handlers described them as “too aggressive and dominant” or “moody”. In regards to male dogs, some described them as “harder” or “more emotionally stable”, whereas others described them as “too needy” and complained about the inconvenience of marking behaviors. There are obvious limitations to relying on human

\textsuperscript{16} See Roughgarden 2014 and Schwartz 2018 for arguments in support of other animals having distinct gender identities
explanations of dogs’ behavior and experiences, and it is likely that these descriptions say more about human conceptions of gender than they do about the dogs’.

**Distracting Bitches**

There was one relatively common complaint about working with female dogs that came up within each of the research settings studied. One Japanese trainer who is also a veterinarian remarked that the suitability of a dog for search and rescue work really comes down to individual personality and ability of the dog in question, but he generally prefers working with male dogs because of biological reasons: *‘it may not be possible to operate with female dogs during estrus’.* Estrus refers to the period of time when a mature female dog is in her reproductive or “heat” cycle and can become pregnant. This was by far the most common response provided by handlers who expressed a preference for working with female or male search dogs (although most handlers did not), and it came up during training events on a few occasions. For instance, at a training retreat in Hyogo Prefecture, Japan with Swiss trainers and Japanese handlers, it turned out that one of the female dogs in attendance was in estrus during the week of the training. That dog was not allowed to participate and was required to be left in the vehicle at all times until the rest of the dogs had finished training. Even then, the lead trainer noted, her presence could still be a distraction to the male dogs who would nevertheless be able to detect that she was in heat.

This is a discussion of a biological characteristic, and is thus related to the sex of the dog, rather than gender. However, the understanding and social significance of the biological reality of female dogs in estrus within the search and rescue team is not free from humans’ gendered biases. An article providing an overview of search and rescue dogs for veterinarians appearing in a leading journal of veterinary medicine in the United States, the Journal of the American Veterinary Medicinal Association (JAVMA), states, “Most female SAR dogs are neutered. This
procedure is encouraged because dogs in estrus searching with other dogs create a distraction. In addition, bitches will lose several months of training and service if they are bred. Neutering of male dogs, while not as critical, is also encouraged.” (Jones et al. 2004). Just as we have seen in training manuals for human search and rescue workers, the tendency to discuss reproductive biology in female SAR dogs, but not male dogs, as a medical liability is prevalent in the veterinary literature. These gendered assumptions affect female human and canine team members, especially since, for various reasons, not all handlers decide to neuter their dogs. One veterinarian expressed the opinion in an interview that in male-dominated fields, the preference for large, intact, big-headed males (referring to the dogs) is unrelated to any difference in performance or ability and is more likely “the patriarchy bleeding into dogs”.

Words that Matter

In addition to the intense emphasis paid to their reproductive cycles, female humans and dogs share another gendered experience in their work as first responders: the title of “bitch”. In veterinary science, “bitch” refers to a female dog, but in human social settings it is also a highly offensive and gendered insult. When applied to humans, “bitch” is simultaneously feminizing and dehumanizing, often used to describe people who transgress a gender norm. In popular culture, it can be used to denigrate men by questioning their masculinity and to represent powerful women as emasculating or stepping out of their place (Kleinman et al. 2009). In the aptly titled article "There Oughtta Be a Law Against Bitches': Masculinity Lessons in Police Academy Training", Prokos and Padavic detail how a hidden curriculum in police academy training in the United States teaches masculinity as an essential requirement for policing and that women do not belong. The authors find this attitude reflected in repeated instances of recruits verbally denigrating and objectifying women recruits by calling them "bitches" (Prokos and
Padavic 2017). The term’s use to describe undesirable female colleagues has also been found to be prevalent in other emergency services, such as fire departments (Ainsworth et al. 2014).

Kleinman et al. (2009) critique the use of the term “bitch” in popular culture, even as some feminists attempt to “reclaim” it, arguing that to use it as an “empowering” term of endearment among women reinforces the idea that women are essentially different from men and “suggests that domination and subordination have become the only legitimate options.” Describing the etymology of the term, Kleinmen et al. (2009) note that it is has been used to suppress images of women as powerful/divine (such as the Greek-Roman goddess Artemis/Diana who was typically portrayed with dogs) and to equate them with sexually depraved beasts (see also Caputi 2004).

What does this suggest for the treatment of non-human animals who are the inspiration for this feminizing, dehumanizing language? “Bitch” is the established scientific term for referring to female dogs, as noted in the veterinary article above, and is not intended as a pejorative in that context. However, it is also presumably not intended as a pejorative to note that, because of their biological condition of sexual receptivity, the presence of said bitches represents a distraction to males in the workplace who find it difficult to concentrate on their jobs because of their desire to mate with the offending females. It is difficult to ignore the parallel between that statement and recent debates over women’s and girls’ distracting presence in the workplace.

17 Lest I be accused of running amok with excessively critical commentary removed from any practical application (i.e. “bitching”), this discussion has been taken up by veterinarians. The veterinary blog website “Vet Help Direct” contains an article entitled “Is it Wrong to Call a Female Dog a ‘Bitch’?” under their controversial topics section, citing concerns that the outdated term may be offensive to clients who understand it as an insult that implies their dog is unpleasant (Dunne 2020).
This problematic framing of the situation as one in which female biology is blamed for provoking male (mis)behavior, rather than blaming, for instance, male biology or some other explanation is part of a broader pattern associated with gender inequality and structural violence (Farmer 2004). Biases toward and vulnerabilities of humans and the non-human animals with whom they are in relationships are co-constituted (Weaver 2017; Parrenas 2018), as these striking parallels in the descriptions of female handlers and dogs working in public safety jobs illustrate. Obviously, there is a great deal of nuance involved in discussions over, for instance, dress codes at high schools and workplace harassment which are unique to human societies and unrelated to the behavior of domestic dogs. Nor is it my intention to reduce human behavior to an analog of “natural”, biologically determined animal behavior. The crux of the debate around dress code issues for girls is that it is unfair and damaging to blame girls’ bodies for “distracting” boys and, as a result, to restrict their behavior or attendance in school settings, a decision which causes social stigma and loss of opportunity for girls while simultaneously excusing boys’ behavior as “natural” and unavoidable. It reveals an assumption that boys belong by default, and if there is a conflict produced in mixed-sex settings, it is the females who should be removed from the situation rather than vice versa. Neville-Shepard (2019) identifies this line of argumentation as “consequential transference”, a type of pragmatic argument that underlies misogynistic culture by emphasizing consequences in such a way that warrants female regulation and punishment by diminishing the accountability of others.

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18 Given the extreme variability present in the behavior of other species of animals, this is an impractical line of reasoning (see de Zuk 2017; de Waal 2017). Even among the most closely related species to humans (chimps and bonobos), dramatic variations exist in behavior, with bonobos exhibiting a tendency toward matriarchal and less violent behavior compared to more aggressive chimpanzees. For further analysis of shared traits with humans and debates attempting to determine which is more likely our last common ancestor, see Hare & Wrangham 2017.
Similarly in the case of working dogs, the unstated assumption is that females, rather than males, are to be removed from the problematic situation (or are to be the ones who are neutered). This is reflected in a stated belief among some handlers that working with females is too inconvenient or impractical. Whether female dogs are affected by any related social stigma seems unlikely, but there is evidence to suggest that reducing or skipping working dogs’ training or enrichment activities with humans negatively impacts their well-being. For instance, a study of military working dogs found that lengthy (greater than 3 days) or unpredictable lapses between enrichment activities, such as working and training, were correlated with decreased canine welfare, and studies of shelter dogs show human interaction, including training sessions, produce a reduction of cortisol levels in dogs compared to those who do not receive any (Lefebvre et al. 2008; Coppola et al. 2006).

In addition to the problematic tendency to seek confirmation of the “naturalness” of certain behaviors among other animals, Marlene Zuk (2003) notes the harmful effects that the application of unexamined gendered stereotypes to animal behavior have on our views of the animals themselves. In scientific literature about bird behavior, Zuk notes references to “female promiscuity”, “illegitimate” offspring, and “wife-sharing” (along with a noted absence of language describing analogous behavior of male birds in any such way) in the scientific literature describing their reproductive behavior. She convincingly argues that failing to see animal behavior from a female point of view can blind scientists to what those animals do, making them less likely to notice how their behavior and relationships affect their social organization.

While the dogs’ attempts to reproduce may be a “natural” behavior, the decision to interpret it as a consequence of unwanted female sexuality requiring the regulation of the bitches’ activities is not. It reflects the seepage of gendered assumptions into scientific and
medical discourse about dogs which, when combined with the same term’s seepage into
gendered and heterosexist discourse about women in public safety services, is problematic. This
is not intended to suggest that there are no practical challenges presented by having male and
female dogs in estrus working in the same space, nor that male dogs are being “sexist” by
harassing their female colleagues - that would be an inappropriate application of human social
meanings to their behavior. But it does highlight the fact that working dogs are employed in the
context of human social workplaces and that their “biological” behavior is viewed and
interpreted through that lens, which leads to real social consequences for them (i.e. Being
removed from training or used primarily for coercive breeding practices). Thus, “bitches” are
subject to both the biological and social connotations of the term

Words matter, and they are applied across species in misogynistic ways within
emergency services. Ultimately, whether dogs “have” gender or merely have it applied to them
by their human partners is a moot point. The existence of a dog’s internal sense of personal
identity is probably unknowable (at this time), but a bitch’s existence in a sociocultural milieu in
which certain gender roles and assumptions are applied to her on the basis of her sex and
reproductive capacity are co-constituted with those of her handler.

Confronting Male Bias

Most female participants in this study did not report experiencing overt sexism currently
in their organization, although some described past problems on other teams and micro-
aggressions (Sue 2010). One fairly common manifestation of everyday sexism, though, was the
overrepresentation of males in leadership positions despite their making up a much smaller

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19 Details of participants’ and organizations’ identities are left intentionally vague in this section to protect their identities
proportion of the team membership. This was commented on by handlers in the US, Japan, and Europe with some members complaining that it resulted in a team hierarchy, attitude, or decision-making process that subtly disadvantaged female team members.

For instance, tactical vests and packs with MOLLE\textsuperscript{20} attachments resembling those used by military and law enforcement operators were often used by SAR handlers in the United States to manage the substantial gear required for performing their duties. Several US participants complained of these gear systems fitting poorly as they seemed to be designed to fit typical male-proportioned torsos. Team uniforms selected by the organization’s leadership had similar problems which, in addition to being ill-fitting could accentuate female anatomy in undesirable or embarrassing ways, sometimes requiring female team members to seek significant alterations before they could use them, even though females made up the majority of the team’s membership. These problems were compounded for participants who complained of becoming the target of unwanted attention and flirtation when shopping for and trying on new gear at tactical supply stores, which tended to cater to other male-dominated industries.

One U.S. handler remarked on the tendency of male team members in her organization to form cliques that led to female members having unequal access to training opportunities:

\textit{Everything seems to be the hierarchy is always males at the top. And so it always kind of seems like when you get a call, and you get there, the guys are always talking to the other guys... And I can even see at trainings where some of the male handlers, maybe they are more boisterous or they are friends with the other males, and they'll almost get a little cliquey. And then 'I need to do this with my dog', and they get set up right away. And if I'm there, and I need to do something with my dog, I might have to wait a couple hours.}

\textsuperscript{20} MOLLE (Modular light-weight load-carrying equipment) refers to a popular proprietary gear attachment system used to securely attach interchangeable pouches and modules to tactical packs and vests.
When visiting various teams to decide if she would join one, a Japanese handler described several experiences in which she felt as though male trainers talked down to women in condescending or offensive ways. Even though women, in general, make good dog trainers, she believes they are rarely in leadership roles partly because of pressure to avoid causing conflict in the group. She described a more extreme example of this that she witnessed in one group that resulted in obvious dysfunction:

*In that other search and rescue group I went to, they don't make any conflict. That one leader is always giving the women orders, and they always follow the orders. So one leader man and 14 women were in that group. But the man was always in charge. It was like they were praising that one man...like God.*

Another Japanese handler provided a similar example that she felt was indicative of male team members’ unwillingness to include females in the team:

*I thought that some female handlers had a harder time keeping up the walking pace with the male handlers. This difference itself would not be a problem if everyone looked out for one another, but I saw that some male handlers made fun of the females for being weak.*

Despite being a job with high proportions of female members, canine search and rescue still exists within a male-dominated professional culture and organizational hierarchy. However, due to the high number of female SAR members, some male handlers who had experience in military or law enforcement described canine search and rescue as being less “masculine” than other first responder jobs. Reasons provided included a lack of an image of physicality or physically strenuous requirements. One US handler with experience in military and civilian volunteer search and rescue explained:
It's not a perceived masculine entity, in and of itself. So when you think Fire Department, what's the first image that comes to your mind? The beefcake calendar. When you think FEMA rescue: 9/11 stuff. You know, the first thing that comes to mind is guys hauling jackhammers. But when you see EMS, I think you're going to start hearing more people saying it's female-oriented... it seems to be shifting that way ...maybe they want to do something for first responder and are comfortable with the concept.

The combination of animal use is not that traditional male role, and I don't mean to be sexist or anything, but... really it’s a negative or an absence: it's not a physically strenuous position, unlike let's say firefighting. And unfortunately, I think that may be, from what I've seen, at least in my current location, an errant idea, because I see a lot of folks who want to be in first responders. They go into canine, they think they can do it. But they're not realizing the physical requirements that come with it. You know, if you are grossly overweight, you're not going to be able to hike the mountains for days on end...and I just don't know if that's part of it. That's why I got into it, because I couldn't do some of the rescue stuff anymore. I was like, ‘oh, canine- it's easy, just kind of walk around with a dog.’

This participant made sure to note that he was giving his impression of general perceptions regarding search and rescue and other first responder jobs and did not intend to over-generalize about people’s abilities. His comments were interesting, though, because he brought up the oft-cited physical ability argument, but his point was not that search and rescue is not also a physically demanding job. He believes that it is, contrary to some people’s initial expectations. On the other hand, he frames other first responder jobs as not just physically demanding, but specifically a celebration of the male physique, providing as examples the sexualized images of partially nude firefighters or FEMA workers displaying large drilling tools. Search and rescue, he explained, is characterized by a negative or absence of this, and is consequently perceived as less ‘masculine’. Tracy and Scott (2006) discuss similar highly sexualized behavior among firefighters as part of their performance of heterosexual masculinity (Tracy and Scott 2006; Ainsworth et al. 2014).
Some handlers remarked that female (and weaker male) handlers could make up for physical inadequacy by partnering with a dog, but noted that this was not unique to canine search and rescue:

*This is all anecdotal but I think female canine handlers in {redacted} are less physically active than their male counterparts, less athletic and therefore they use the dog to compensate for that. That said, some of the best handlers I know are Mach 10, high-speed, low-drag women who run marathons. It’s the same in law enforcement, the K9 handlers are usually the heavier, fat, out of shape guy who is compensating for that with a canine. So it’s a compensation issue.*

However, other participants argued that the prevalence of women among SAR handlers was not related to a “lack” of anything but to a recognition that working together with a canine partner required a commitment to mental and cognitive abilities that were discounted as undesirable by masculinist framings of the job but were, in fact, essential to it. Some handlers regarded the ability to effectively communicate with a canine partner as an essential part of the job that could be hindered by overly aggressive or dominant displays.

**Vocal Training**

Vocal pitch is one area in which the perception and performance of gender stereotypes matters in canine search and rescue training. Studies of human vocal pitch and gender stereotyping have found that women’s voices are perceived by other people as more feminine and likable when they are speaking in a higher pitch; whereas lower pitch is associated with masculinity and dominance (Borkowska & Pawlowski 2011). In canine training, however, it is customary for handlers to modulate the pitch of their voice based on what is most effective for encouraging the dog. During training this means that both female and male handlers tend to
praise and reward their dog for successfully completing a task in as exaggerated a high-pitched voice as possible\textsuperscript{21}.

The importance of this aspect of training was impressed upon me during a training with a US-based team during which I was tasked with acting as a training “victim” and hiding in some trees in a wooded area. Each of the dog-handler teams would take turns searching the area and, once the dog located me and gave the proper signal to their handler (usually a certain number of sustained loud barks, depending on the dog’s level of experience and training), I was to reward the dog by giving profuse verbal praise and providing the dog’s toy reward in the form of a ball or tug toy. This is intended to be highly exciting and rewarding for the dog and referred to by handlers as “paying” the dog. The timing and delivery of this payment is extremely important because training dogs to search typically relies on a form of operant conditioning based on gradual shaping of existing behavior through numerous repetitions in which the dog is rewarded for progressively more difficult tasks. A puppy might begin training by being rewarded for a very simple exercise such as running to their handler from a short distance away. Over time the difficulty of the task is incrementally increased by adding distance, making the handler a little bit harder to locate (which forces the dog to use their sense of smell instead of relying on visual or verbal clues), introducing a stranger as the “victim” to be found and so on. As the dog learns and becomes increasingly proficient at finding people who are hidden out of sight, they progress to more and more difficult variations of the search task.

\textsuperscript{21} Recent studies with fMRI scans of humans and dogs have found that both species share some similarities in voice-sensitive regions of the brain and that dogs are responsive to emotional valence in human auditory signals, which may contribute to the ability of dogs and humans to cooperate. See Andics et al. 2014.
Over a period of months or years, if the training and teamwork is successful, the dog becomes more proficient and able to search for extended periods of time to find strangers who are well hidden in a large area that may contain difficult terrain. Learning to work these more complex problems requires teamwork on the part of the handler and the dog in that the handler has to be able to direct the dog towards the areas that need to be searched or avoided and to be able to tell when the dog is “in scent” (detecting human odor) in order to help them figure out where it may be coming from or to determine which areas can be eliminated as possibilities. Similarly, it is necessary for the dog to be able to understand and respond to the handler’s commands but also be willing to disregard instructions if the handler mistakenly attempts to direct the dog away from human odor. Thus, being an “independent thinker” and having high enough confidence and motivation to locate the “victim” that they are willing to ignore handler commands to go in the wrong direction are important attributes for the dog.

This process relies on maintaining excitement during training and being precise about rewarding desired behavior as soon as it occurs so that the dog develops a clear understanding of and motivation to play the game. The dogs must understand what they are being rewarded for and the reward must be more pleasurable for the dog than doing anything else, such as wandering off to investigate other interesting smells in the area. Part of generating excitement and enthusiasm is done by verbally encouraging the dog’s eagerness to participate in the training (in addition to other rewards). One experienced handler, when describing the proper vocal pitch to use, called it a “happy puppy voice”. He suggested that the “high pitched squeal voice” may be more effective because it sounds like a prey animal to the dog. It elicits a different response than a low-pitched voice and has become a way of getting the dogs attention in a positive manner and creating excitement.
The American Rescue Dog Association’s manual on training search and rescue dogs describes using the proper voice inflection as one of the most difficult things for new handlers to learn, admonishing that the handlers’ “shyness” must be overcome in favor of encouraging the dog’s eagerness (American Rescue Dog Association 2002). This turned out to be the case in my experience as I attempted to imitate the vocal pitch of the other canine handlers when I praised the dogs for finding me during the training exercise in the woods. After a few repetitions one of the handlers, Julie, stopped me and said this time I need to actually talk in my “girl voice.” Confused, I responded that I thought that is what I had been doing. As someone with what I would describe as an average to slightly-lower-pitched female voice, I had been making a conscious effort to praise the dogs in as high-pitched excited a tone as I could muster. This was nowhere near the mark, I was informed. Julie tried patiently to explain, “I mean it, like five-year-old-girl-justgota-pony voice. Your objective is to act a fool.” I continued to try to develop my high-pitched squeal voice but thus far have probably only succeeded in accomplishing the latter half of her instructions.

As I continued talking with Julie and the other handlers about how to produce the appropriate sounds to praise the dogs, it occurred to me that I had actually spent years training myself not to produce the high-pitched sounds they were describing, partly as a result of training I had previously received in law enforcement. Years ago, when I trained to become licensed as a police officer, there was a portion of our academy in which recruits were evaluated on their ability to yell loudly in a deep voice. This was known colloquially as a ‘war yell’ and was intended to train recruits to exude authority through their vocal presence. We had some brief training and then practiced in the gym one at a time, each shouting as loudly and deeply as possible to either the approval or ridicule of our fellow recruits and trainers. To no one’s
surprise, the female recruits (there were three of us in a class of approximately 30) tended to yell in a higher pitch than many of the male recruits. Of course, there were also some males whose vocal pitch did not meet with the approval of the group, and everyone laughed at them. But when the females went, their performance was met with both laughter and a sense that I could only describe as condescension. Concerned, knowing glances were exchanged between some of their male peers along with comments like “it just sounds like she’s screaming”, the implication being ‘how will she exude the authority and necessary “officer presence” to gain compliance if she sounds frightened instead of frightening?’ Oddly, nobody asked when this war yell would actually be used and whether it would seem appropriate or professional, much less intimidating, for any of us to be screaming loudly and incoherently at a citizen. But the message was clear: speak as deeply and aggressively as possible at all times or you will be ineffective at your job and ridiculed by your peers. This is consistent with the observations of Prokos and Padvic 2017 regarding a hidden curriculum of hegemonic masculinity and Berdahl et al.’s “masculinity contest”.

“Squealing like a five-year-old girl” and “acting a fool” are not usually part of the training that goes into male-dominated public safety jobs (outside of canine handling). But in SAR training, the expectation of vocal pitch was reversed. Suddenly, speaking in a deep voice was the failure, and it was explicitly regarded as ineffective and an inhibition of one’s ability to gain compliance of a canine partner. This was a surprising and difficult shift for me. And while I met many male handlers who were perfectly capable of praising their dogs in the ‘happy puppy voice’, other men I interviewed described having so much difficulty with this aspect of training that it severely impacted their ability to train or work with their dog. This failure was sometimes framed in terms of the dogs being too “soft” or sensitive.
One male canine handler directly connected pitch to gender stereotypes and applied those to his dogs as well:

*I don't know if this is well known, I guess it is in German Shepherd circles, that the males will be a lot ‘harder’. Females are just way emotional, way sensitive. In fact, that was part of my problem ruining Bella as a trailing dog because my voice is low. It was unpleasing to her when we were working and I was giving commands. So then whenever we're working, it has to be that high friendly pitchy voice. So you know we have one lady who I'm good friends with. She's done this for years. She's one of the top notch folks in FEMA. And even she was saying your next dog has to be, for lack of a better term, an asshole male. Because it's just my voice and everything. Because she knows that it's rough on Bella. She wants to please but it's hard hearing that.*

Similarly, Jack mentioned that he had to be careful with his dog because if he raised his voice too much to tell her to stop doing something while searching (this dog had a bad habit of trying to eat horse feces), she would “*shut down and stop wanting to work*” altogether.

Other interviewees specifically identified the high-pitched voice with an appearance of unprofessionalism when working with other teams of first responders. Scott has experience volunteering for SAR with a sheriff’s department. He is a medical specialist but his wife and daughter are dog handlers. He said he “*gets a kick out of*” watching their interactions with their search canines which he described as including “*baby talk*” suggestive of a “*frustrated maternal instinct*” on the part of the handlers who appear to treat the dogs like their children. This does not fit with his expectations and experiences with other first responders, even other kinds of search teams. He provided an example of the stark contrast he sees between canine SAR and other law enforcement teams. He describes the scene at a large search operation for a missing person in the desert in which the police department had to call out the canine SAR team after they were unable to locate the person with their own resources or patrol dogs:
PD was there, and SWAT, and they had the patrol dogs - and of course they weren’t going to find anything. So they called out the search team. And they show up and it’s a lot of women and they are all getting their dogs out and talking to them like they are their kids and they’re all different breeds and they are running around and of course they are all very sociable and playful because they are SAR dogs. And this one officer is like, “Those aren’t search dogs- those are pets!”

These comments suggest that some handlers in first responder settings may experience a conflict in which they are forced to choose between acting in a way that promotes a better working relationship with the dog or acting in a way that promotes an appropriately “masculine” (i.e. dominant) image among their human peers, suggesting an internal contradiction in the “masculine” logic produced by conflicting desires (Connell and Messerschmidt 2005). Never mind that the SAR teams in Scott’s example were better suited to the task than the other teams on the scene and were apparently exhibiting job-appropriate behaviors [recall that being sociable and playful are pre-requisites for SAR dogs], they were discounted by the incredulous officer as not being real search dogs since they (and perhaps their handlers) failed to conform to his expectations of public safety professionals. Some participants elected to resolve the contradiction by reframing the dogs as insufficiently masculine by being too “soft” or too sociable, playful, and associated with females.

Brandon describes, in contrast, the freedom with which civilian volunteer canine handlers seem to operate, showing no compunction about doing things that seem “unprofessional” if it is a part of training the dogs:

*It’s still male-dominated in USAR [referring to a FEMA disaster team] because it’s primarily firefighters and that’s predominantly male. So when I work with handlers in wilderness work, they are civilians and have less attachment to whatever silly environment they might be in. So they’ll do all the crazy stuff like get down and play with their dog and stuff. It’s not like protection work. That high pitched voice is not a very*
professional voice to have - it sounds like Mickey Mouse. But that's not an issue {for volunteer teams}.

For some participants, professionalism is associated with a deep voice, whereas “soft”, “sociable”, “maternal”, or “high pitchy” things do not belong in the self-consciously masculine space of first responders. But these organizations still need the dogs, and “winning” at a cultural-bound, species-specific dominance display could mean “losing” at working successfully as a dog-handler team. The addition of a dog to the workplace environment disrupts the assumption that acting in the expected “masculine” way equates to being more effective at one’s job. The disjuncture was apparently jarring for some participants, which limited their ability to work with some dogs.

Some female handlers leverage this conceptual space to assert not only their suitability for a job that otherwise tends to devalue “feminine” contributions, but also to propose alternative conceptions of the overarching goals of public safety in the first place, referring to an ethics of care (Black 2018) that includes responsibility to humans and canines.

**First Responders as Caretakers and Problem Solvers**

Jessica emphasized the role of SAR handlers as caretakers, in regards to their dogs but also to their teammates and the public:

*We're often willing to challenge ourselves, and not just in physical ways, but more mental ways. Guys like to be able to climb that burning building. But, have you tried figuring out the maze of the burning building? A lot of our job is hiking so there's a lot of the physical….But I do think that it's a lot of the care. That mothering caring instinct comes out with this job. Because we do have a dog with us. And we do have other people that are relying on us. And then we're also looking for somebody who also needs help. And I think that that does draw out a lot of the women.*
Some participants noted fewer arbitrarily imposed barriers to participation in SAR that are typical of other public safety professions, such as ill-fitting uniforms and equipment or harassment from peers (although, as noted above, those barriers may not be entirely absent, just reduced). They also noted an organizational culture that better reflected what they perceived to be the purpose of search and rescue: care-taking. Erin, a North American canine handler and trainer commented on search and rescue being a more inclusive environment:

*It feels good to be a first responder, but maybe they {women} don’t have the opportunities in a police department. So maybe they go into search and rescue because it’s one of those fields where you just walk up and you say ‘I’d like to do this, please.’ And as long as you put in the work, you can do it....It’s a very inclusive, comfortable environment, whereas in my experience - and I have a lot of friends in law enforcement - the culture is not always ideal. So I think it’s probably an easier opportunity. I think it makes sense from a caretaker kind of perspective. You want to go and help.*

Anna describes how she first became involved with training SAR teams in Japan by bluntly telling an organization leader who wondered what so many women were doing there that canine SAR is primarily a mental endeavor, which makes women better qualified to do it:

*There was a Japanese delegation that came to Switzerland to see search and rescue and they came to our training place. I was, at the time, Chief trainer...So we showed them about, and they watched us. They saw my group is a lot of females. So they asked, ‘who's president, who's in charge’ and it was practically all females. So the chief of the team said, ‘Why do you have so many women in top positions in your group?’ So I laughed and said, ‘Well, training dogs used to be this [points to flexed biceps muscles]. And now training dogs is this [points to head]. So it's obvious that women are coming in’. And I mean, the men were, well you can imagine.*

To Anna’s surprise, that team later asked her to come and evaluate their training standards because: *‘If you say things like that, you will be honest about the training.’*
It is significant that Erin reframes being a first responder as being a “caretaker”. She does not assert that women engage in canine search and rescue because of some perceived affinity for caring for dogs as surrogate children, but that first responders are caretakers and women’s involvement is explained because they face fewer arbitrary barriers in SAR than they do in other jobs to which they would also be suited were it not for an organizational culture that excluded them. And Jessica notes that although the job is physical, the point is not a display of physicality for its own sake. Handlers emphasized the mental aspects of solving a search problem and the motivation to act as a “caretaker” to non-humans and humans as simply more important goals. That those are evidently necessary to the task when a search dog is involved makes it more difficult to devalue them.

While comments like Anna’s were directed toward correcting a sexist comment and should not necessarily be taken as evidence of actual sex-based differences in dog training ability or intelligence (after all, many men are also involved in canine search and rescue), they illustrate a larger point: that women’s ability to leverage their association with animal care and training and thus present themselves as part and parcel of a canine search and rescue team is a way of getting one’s foot in the door to participate in an otherwise heavily male-dominated field. One handler described the situation as partnering with a dog to get one’s “foot in the door for a typically male world. And now I have this valuable dog that you need and if you want my dog, you need to bring me along.”

Back at the disaster preparedness day demonstration from the opening vignette, Kimura-san and Gracie, along with the other canine teams, completed their demonstration and located their assigned “victims”. Afterwards, several members of the other emergency services came by to meet Gracie. Possibly due to her prior training as a service dog or maybe her general air of
approachability compared to the German Shepherds on the team, Gracie is usually one of the more popular search and rescue dogs at public events, enthusiastically greeting soldiers, firefighters, and children alike. Her ability to have positive affective encounters with almost anybody gives DRDN an opportunity to raise awareness of their organization and educate other agencies about their capabilities.

Reflecting on the day’s events and her hopes that DRDN could cultivate a good working relationship with more prefectures throughout the country, Kimura remarked that in this prefecture men and women have a history of working together in the historic silk mill that this area is known for [another kind of multispecies endeavor]. This may be one reason they have accepted DRDN which has women dog handlers, she speculated, whereas other prefectures have not yet. Regardless, Gracie provides an important public service, and so does her partner, Kimura. For cities and prefectures that want to have search and rescue in their repertoire of disaster preparedness tools, they are obliged to accept the handlers along with the dogs.

Discussion

The experiences described by handlers in this chapter argue that the performance of security and emergency services is very much a performance of gendered expectations. But the fact that so many female handlers are able to leverage stereotypes as caretakers and “dog moms” to get their foot in the door to do a “tactical” hobby problematizes binary masculine/feminine thinking, especially if it involves reducing people’s relationships, not just to humans but to other animals as well, to models of heteronormative reproductive relationships (“dog mom”; “fur baby”) to which they bear little resemblance in actual practice. As previous chapters have demonstrated, the search dog is not a helpless child needing mothering but is relied upon to do the bulk of the job as an independent thinker.
Women asserting themselves as belonging in search and rescue, and by extension other public safety services, because they are good caretakers could be read as a performance of heteronormative gender roles—the stereotypical woman as caretaker. But it could also be read as a transgressive and political act because of its assertion that it is a behavior that belongs in a “masculine”-coded space and attempts to alter the logic of that space by entering into a non-reproductive, interspecies partnership that defies the heteronormative gendering conventions that are placed on female handlers and dogs individually. Recall the statements by some handlers that women could “make up for” their physical “lack” by attaching themselves to the dog. As working partners, neither is reduced to their “biological” state anymore. Consistent with Irni’s “queer multispecies bonding” (Irni 2020) and Haraway’s call to “make kin, not babies” (Haraway 2016), the dog-handler relationship in this case made it possible for the dog and handler to advocate for each other to be taken more seriously in terms of their contributions to public life - in other words presenting the dogs as less “childlike” and the handler (if non-male) as having a more valid claim to the space as a serious contributor to public safety.
Chapter 4

CORRESPONDENCE: “LET THE DOG WORK”

One of the interesting things about doing multi-sited fieldwork was that participants from different field sites were often curious about how things were done at the other sites and would ask me to describe what it was like working with SAR handlers in other countries. Nakamura-san, for instance, would sometimes ask me questions about how US-based teams approached certain problems or what their standard practices were in regard to specific issues that came up during training such as what breeds of dogs handlers preferred, when the dogs would retire, what happened to the dogs after retirement, and so on. Sometimes he made notes of my answers. Handlers from the United States tended to ask similar but slightly less specific questions such as, what training was like in Japan and whether the search dogs were Japanese breeds, too. The questions of US handlers suggested an expectation that there would be a “Japanese” way of doing SAR and that it would have emerged through the use of “Japanese” dogs. This is not, in fact, the case. As the history of the German Shepherd dog will illustrate, canine search and rescue, as it is performed today, was a foreign import. DRDN members tended to rely on foreign dogs and foreign training and testing standards, which did not always match local expectations about animal training and care.

Kajiwara argues that the human/pet relationship is one in which the globalization of ideas and attitudes can still be observed spreading into societies (usually from West to East), also
noting the tendency in Japan for culture and embedded institutional arrangements to slow the flow (Kajiwara 2016). This effect can certainly be seen in the context of canine SAR. SAR dogs on volunteer teams may be regarded by their handlers as pets in addition to working dogs, but they are not pet-like in the sense of being decorative accessories nor furry surrogate-humans. SAR handlers repeatedly confronted tensions between their expectations of SAR dogs and those of the broader public as local and global conceptions of dogs as pets or agents of government control, some of which were mapped onto particular breeds, impacted their ability to work. Since dog and human social identities are co-constituted (Haraway 2003; Weaver 2017; Parreñas 2018), the social importance placed on dog breeds has unfortunate consequences for SAR teams in terms of public image and performance in that it can create discomfort for some members of the population and become mixed up in conceptions of national identity and modernization that objectify domestic pets, leaving little conceptual space for working dogs to do their jobs.

With these connections in mind, this chapter asks who works in canine search and rescue, and what kind of intersectionalities are involved in the relationship that is thus formed between handler and dog. Using Weaver’s (2017) concept of “interspecies intersectionalities”, I will explore the tension handlers sometimes expressed about selecting a SAR dog who is significant as both an individual and as a member of a breed, a process which is complicated by a complex mesh of biological and social histories predating both handler and dog as well as the imperial and post-colonial implications of these relations as they occur in transnational settings.

Who Can Participate in SAR?

The previous chapter explored how the formation of the handler-dog team produces a queer, multispecies bond that allows some female handlers greater access to opportunities to serve in public safety positions. However, it should be stressed that these privileges do not
extend to all people. Canine search and rescue is an activity that is financially expensive, physically demanding, time-consuming, and requires a close relationship with dogs and governmental authorities. This is a combination of factors that tends to exclude broad swaths of the general population, especially ethnic minorities and other marginalized groups. As a result, in the populations I studied, in addition to skewing heavily female, human SAR members tended to be older, able-bodied members of the dominant ethnic group who often had experience or current employment in government service and/or industries related to animal care such as veterinarians, dog trainers or breeders. This was consistent across cultural contexts, with minor differences mainly apparent as they related to the particular economic structure and relationships between government services and volunteer organizations.

In Japan, the time needed to devote to the organization was most often mentioned as the limiting factor. Explaining why more young people were not involved, Kondo-san suggested:

*I think the barrier comes from a financial perspective. It requires travelling across Japan and taking days off from school or work to attend trainings. If your education and occupation is not related to dog training, it would be very difficult to get understanding from your school or workplace to take time off for volunteering. I think it is important to be able to run an organization with variation in age so that the organization can keep running even after the current heads step down.*

It is not merely the financial burden of training, equipping, and caring for a search dog, but the time commitment that requires significant absence from work that makes volunteering unrealistic for many younger people, especially men in Japan. Because women in Japan are less likely to be employed in full-time work, several respondents suggested that as one reason for their high levels of involvement in canine SAR compared to other professions. As noted in Chapter 3, to some extent it is women’s exclusion from the formal economy as regular workers
that grants them the flexibility to engage in an industry that might otherwise be closed to them. But it is still of course only open to people who do not need to work full-time in order to survive. Thus, Kimura noted that it is really only an option for people who are retired, have income coming in from another family member, or can perform their paid employment simultaneously with their volunteer obligations. Accordingly, many of the participants I interacted with at DRDN maintained an active role in the organization, including training as dog handlers, well into their 60s and 70s.

Being in a job field related to working with animals was another solution that made volunteering possible. Mori-San, one of the lead trainers in DRDN, sometimes arrived at training and even live missions with a van load of poodles, shibas, and dachshunds in tow. In addition to her experience with the Fire Department and training professional working dogs, she also performed training and pet setting services for ordinary citizens’ pets, which allowed her the flexibility to devote the necessary time to train and breed SAR dogs.

The time and cost commitment, as well as the necessary prerequisite knowledge and skill pertaining to dog training and care, can be even greater depending on the type of dog one selects. Amy’s dog, Max, is a Belgian Malinois, a working breed known for extremely high energy and drive. The American Kennel Club describes the Malinois thusly: “The smart, confident, and versatile Belgian Malinois is a world-class worker who forges an unbreakable bond with his human partner. To deny a Mal activity and the pleasure of your company is to deprive him of his very reasons for being” (Belgian Malinois, 2021). Informally, handlers described them to me as “German Shepherds on crack”. One of the most experienced European handlers involved in this study, Anna, commented that “life is too short for a Malinois”, referencing their extreme levels of energy and intensity. Amy loves working with Max but she does not recommend that
inexperienced handlers start out with a Malinois. A “true working dog” she says, has such high drive that they “struggle not to have a job”. Consequently, they tend to make poor pets, get into trouble, and can even be overwhelming for SAR handlers who are not able to provide adequate physical and mental stimulation for them.

Thus, although canine SAR is a volunteer-based activity that is theoretically open to anyone, there are clearly many barriers to participation that, in practice, tend to fall along racial/ethnic and class lines, producing organizations whose membership is not representative of society at large. Because canine search and rescue teams provide a public service, this lack of diversity is not an unimportant consideration. Too much inbreeding rarely produces positive results, especially in this field. Additionally, despite handlers’ affection for their canine partners, working dogs differ from pet dogs in important ways. I will discuss some aspects of dog breed selection and the social implications of those selections for SAR handlers.

**SAR Dog Breed Selection**

Several handlers remarked that a search and rescue dog is often perceived by handlers as an extension of oneself. As such, the dog’s accomplishments and characteristics can reflect positively or negatively on the handler. Dogs that are successful showcase the hard work and skill of their handler whereas dogs that are deficient in some way reflect poorly on the whole team. When selecting a SAR dog, handlers know they will have to invest years of effort into the relationship before the dog will even be eligible to become certified and join live missions, so it is essential to maximize the likelihood of selecting a dog that will work out. Breed preference is a key part of this decision process for many handlers, and they tend to have strong opinions on the matter.
I interviewed handlers about their preferences for various breeds - if they had one - and their process of selecting a SAR dog. In regards to breed, three major themes emerged as common considerations: capabilities, temperament, and image. There were handlers who expressed little preference, whereas others felt so strongly about their preferred breed that they divided themselves into opposing camps. Among handlers in North America (and, to some extent, Europe), the most contentious difference of opinion boiled down to the preference for either “pointy-eared” or “floppy-eared” breeds of working dogs. As the terms imply, pointy-eared breeds include those whose ears stand up straight like the German Shepherd Dog and the Belgian Malinois, whereas “floppy-eared” breeds include those with droopier ears like Labradors and Retrievers. On the other hand, each of those breeds were popular among Japanese handlers, with some debate arising over the selection of dogs from non-working breeds, which I will refer to as “equal opportunity aiken”. Although there are many similarities in terms of breed preference among SAR handlers in Japan and the United States\(^\text{22}\)\(^\text{(See Table 4.1 and Table 4.2.)}\). I will address their perspectives on the question of “image” separately, since it is embedded in different national histories which should be considered in context, as will become clear.

Whereas the breeds commonly preferred by U.S. and European SAR handlers also tended to be popular among pet owners in their home countries, this was not the case in Japan.

According to the American Kennel Club, the top three most popular dog breeds in the United

\(^{22}\) Table 4.2 does not necessarily reflect the popularity of the German Shepherd Dog breed among SAR teams in the USA. This may partly be due to the growing popularity of the Malinois, but also is a function of the fact that these data were taken from the team roster of working dogs at a single point in time. There are members of this team who prefer German Shepherds but did not happen to have one currently training/certified at the time this roster was made. Interview data from members of other teams in the United States who work with German Shepherds are included later in this chapter. I did not collect sufficient data or permissions to produce a meaningful chart depicting breed preferences among European participants, but I do include perspectives on breed from European handlers in the interview data.
States in 2019 (excluding mixed breed dogs) were the Labrador Retriever, German Shepherd Dog, and Golden Retriever. And the Belgian Malinois, although not in the top 10, moved up significantly to 37th most popular in 2019\(^{23}\) (Reisen 2021). The popularity of these breeds among pet owners closely reflects their popularity among the SAR handlers in this study (see Table 4.2). Similarly, in Switzerland a 2018 study that drew statistics from the Swiss animal registration database (ANIS), which tracks all resident dogs in the country, found that the most popular breeds during the study period (besides mixed breeds) were Labrador Retriever, German Shepherd, Yorkshire Terrier, Jack Russell Terrier, and Golden Retriever. The Border Collie and Belgian Shepherd were also in the top ten (Graf et al. 2018). Although I did not gather statistics on SAR dog breed preferences of European handlers, partly due to confidentiality concerns and partly due to a smaller sample size, many of the handlers I encountered worked with those breeds. For instance, Anna and Agatha had border collies, and the other European handlers I interviewed operated with Belgian shepherds, Labradors, Golden Retrievers, and terriers.

A 2015 survey by the Japan Pet Food Association (Japan Pet Food Association 2015) found that the most popular dogs breeds among Japanese pet owners (excluding mixed breeds) were the dachshund, chihuahua, toy poodle, and Shiba inu. This contrasts sharply with the breed selections of handlers in Table 4.1, although the Golden Retriever and Labrador Retriever did make the survey list at a distant 8th and 9th place. So, the Japanese handlers represented in this study tended to purchase less popular, foreign breeds of working dogs rather than selecting local working breeds or popular pet breeds. It should be noted that it is not an uncommon practice among participants in U.S. and European SAR teams to import foreign dogs from lines of

\(^{23}\) These figures were determined using the AKC’s pet registration statistics, which are limited in that they only include so-called “purebred” dogs. They do not count mixed breed dogs or pets that are unregistered for some other reason.
shepherds and retrievers specially bred for particular jobs and that those breeds do have a long history of involvement in SAR training in established US and European SAR programs. However I will argue that, in both the U.S. and Japan, considerations of extraneous social factors including positive and negative perceptions of the dog breeds’ association with police/military work and foreignness were projected onto dog’s bodies and drove dog selections to the extent that an inordinate amount of time and effort had to be expended managing perceptions of the dogs, which got in the way of handlers’ primary mission of “letting the dogs work”. Whereas in the previous chapter, female handlers managed to leverage conflicting narratives about sex and gender stereotypes to their advantage, it appears that similar stereotypes about breed and national origin did not produce such favorable outcomes.

To be clear, although dog breeds can be considered something of a social construct, they should not be taken as directly analogous to “races” in humans (Norton et al 2019). The potentially harmful effects of comparing humans to other animals in the context of discussions of race are obvious, and assumptions about biological bases that could be selected for to produce complex characteristics such as “intelligence” and “loyalty” have been used to promote unscientific, racist ideology (Skabelund 2008). That said, I will consider the possibility that socially constructed misperceptions about both dog breed and human race/ethnicity or national origin can combine when applied to a dog-handler team.

The propensity for dog owners to conflate “breed” and race/ethnicity/national origin and to construct social hierarchies around them has been noted by researchers in multiple contexts. Lasco (2021) describes the relative preferences for “pure bred” dogs and those with foreign heritage as a form of “racial capital” (Hunter 2011) among dog owners in the Philippines, mirroring social rankings of human residents. And in European and American contexts,
particular breeds of dogs have long been associated with higher or lower socioeconomic neighborhoods, resulting in some kinds of dogs being regarded as welcome signs of gentrification and others being subjected to disproportionate enforcement and control efforts (Hubbard and Brooks, 2021) In this chapter, I will argue that the association of particular dog breeds with social histories and stereotypes plays a larger role in working dog selection than handlers tend to acknowledge.

Fig 4.1 Photograph taken during a testing and certification exercise with DRDN in Tokyo featuring a German Shepherd, black lab, and a mixed-breed dog identified as part poodle and chihuahua. The mixed-breed dog does not perform actual searches but attends public relations events as a member of the team to promote awareness and interest in search and rescue work among the general public.
Table 4.1 Breakdown of search and rescue dog breed of a Japanese SAR team as represented by attendance at their annual disaster preparedness training seminar. N = 14 dogs specializing in air scent for disaster settings.

Table 4.2 Breakdown of search and rescue dog breed as represented by a team in the southern United States. N = 20 dogs specializing in air scent, human remains detection, and trailing. Note that bloodhounds are primarily used for trailing, which is not a discipline that the Japanese team above was actively engaged in.

*Figures for illustrative purposes only, not representative of all teams in either country. Both charts include dogs that are in training as well as mission-ready dogs.
**Pointy-eared vs Floppy-eared**

Among U.S. handlers, the debate about pointy-eared dogs and floppy-eared dogs is organized around a morphological characteristic (ear shape), but that is not the characteristic that handlers are so opinionated about. Ear shape is simply used as a proxy to describe groups of breeds that are perceived to have certain differences in terms of temperament, ability, or general likability/image according to handlers in the divergent camps. Importantly, these dog breeds also have different social histories which impact public perception of them.

**Ability**

According to handlers, SAR dogs are working dogs first and pets second. In order to participate in SAR, human and dog both have to be able to meet certain minimum requirements as determined by their organization’s certification standards. As such, ability is one of the factors handlers commonly mentioned when discussing breed preference and selection.

In recent study about differences between SAR dogs and pets, Hare et al. (2018) found that SAR dogs who successfully passed certification exams tended to exhibit differences in behavioral traits compared to pet dogs (of comparable breed, age, and sex) in that SAR dogs had higher scores for trainability and energy, and lower scores for aggression, fear, and chasing compared to pet dogs. The Journal of the American Veterinary Medical Association provides an overview of SAR dogs for veterinarians, listing additional qualities deemed important for SAR dogs. These include hunt drive, prey drive, and ball drive as well as other traits including trainability, good temperament, reliance on scent rather than visual contact, inquisitiveness, friendliness, and a need for purpose/focus for their energy (Jones et al. 2004). While these traits are commonly expected among certain breeds, no single breed has a monopoly on all of them.
Jones et al. (2004) note that while most SAR dogs belong to working, herding, retrieving, or sporting breeds, dogs of other breeds and mixed breeds can also be successful. This leaves a good deal of room for individual variation and handlers’ individual preferences.

In regards to the enduring popularity of the German Shepherd dog, an experienced European handler and administrator noted that although they may not be the “perfect” breed, they are very good and versatile. During a conversation over lunch during a training event, he remarked:

*I prefer German shepherds. They are all arounders. As a breed they are really second best at everything. Maybe not number one but they are good at almost everything. They’re less popular these days because most people who like German Shepherds are going to the Belgian Malinois. People sometimes think GSDs are aggressive but that’s not necessarily so. Maybe it’s something about their mannerisms that gives people that idea but it’s not really true. I’ve seen more aggressive goldens [retrievers].*

This answer was typical in its identification of certain physical abilities as innate to members of certain breeds, making them preferable for jobs matching those abilities, while identifying temperament as a matter of individual variation.

Another set of handlers who expressed strong preference for breed based on ability were those who engaged in the trailing discipline. For instance, almost all of the trailing teams on the US-based organization I worked with have bloodhounds. Bloodhounds are considered “scent dogs”, having been specifically bred for that ability and have been found to perform consistently better at detecting odor compared to other breeds in some empirical tests (Polgar et al. 2016). One bloodhound handler described his selection process as “a simple math problem”: bloodhounds have a much larger proportion of their brains devoted to processing olfactory stimuli compared to other breeds like Labradors and shepherds. Their lips and very floppy ears
are also shaped in such a way that they drag on the ground and help with picking up scent. It may not matter for easier tasks, but it probably does matter for much older trails that are more difficult for dogs that lack those traits, he explained. Despite the fact that bloodhound handlers usually described bloodhounds as more difficult to live with (most of the bloodhounds I encountered during this study lived outdoors), some handlers were willing to accept this tradeoff as the bloodhound is simply a more reliable partner for trailing.

The dog’s ability is not the only consideration for a SAR team. The dog and handler still have to be able to cooperate. One handler joked, “The best person for a bloodhound handler is a person on rollerblades with ear muffs on – just hold onto the loopy end of the leash and hope the dog doesn’t walk off a cliff.” He explained that the dog may be able to detect scent and follow a trail just fine, but a nervous or pushy handler could disrupt the dog’s work. Thus, regardless of the dog’s characteristics and abilities, those of the handler must also be considered as they can combine to produce either a positive or negative outcome for the team.

**Temperament**

It is not surprising then that handlers tended to place great importance on temperament when describing their preferences. Importantly, although most handlers recognized some degree of breed difference, they tended to describe the most significant considerations as the ones that affected the development of a working relationship, emphasizing personhood (in the sense of Smuts’ earlier discussion) and individuality among dogs, even while taking a position based on a priori assumptions about breed characteristics.

Statements about breed characteristics are rooted in expectations based on genetic contributions, but are not entirely determined biologically. Earlier in this chapter, I referred to
the American Kennel Club’s description of the Belgian Malinois as being characterized by traits such as being a good worker and forming a close bond with handlers. Later, I will describe a Japanese breed known as the Kai ken as having a different coat color than the Shiba Inu. These are not statements of absolute biological fact but rather generalizations that correspond to an “ideal type” represented by the concept of “Belgian malinois” or “Kai ken”. Empirical examinations of kennel club “breed standards” that describe morphological and behavior characteristics of dog breeds suggest that it is not at all established that those descriptions are accurate. Recent studies suggest that breed standards actually align poorly with observed behaviors, may overlook individual variation within breeds, and in some cases describe behaviors with little genetic component or that would be difficult to accurately measure in the first place (Norton et al. 2019; Hradecka et al. 2015; Mehrkam and Wynne 2014). This is certainly reflected in handler narratives about their own experiences with particular breeds, with almost all of them going to pains to point out the prevalence of within-breed variation in terms of temperament and noting the interaction of both genetic and social inputs in the context of producing and perpetuating breed specific characteristics and expectations\(^2\).

A Japanese handler summed up this view: “Perhaps statistics show that excellent dogs are concentrated in some breeds with a significant difference, but in the end it comes down to individual personality and ability”.

In terms of temperament and personality characteristics, handlers tended to refer to common characteristics of their preferred breeds in terms of both morphological (size, body shape etc.) and behavioral terms, but they invariably pointed out that they could think of plenty

\(^2\) See Norton et al. 2019 for an excellent explanation of the ways that dog breed and human race are different concepts.
of exceptions to the “rule”, often citing their own dog as an example. A more important consideration for handlers of pointy or floppy eared dogs was managing public perceptions and stereotypes. Two characteristic handler narratives are presented below:

**Team Pointy-eared**

Rachel, a handler from the United States, expressed a strong preference for German Shepherds and has worked with several of them over her decades-long career as a handler. The main reason: “I like a dog with attitude”, she said. When Rachel began discussing the debate on pointy versus floppy ears, she began by saying it is simply a matter of personal preference but then reframed the discussion to place the responsibility on the handler to recognize the dog’s individual characteristics and to protect the dog from unreasonable or unwanted expectations:

*I think it's personal preference. I personally would never work a floppy eared dog just because I like a dog with attitude. But there's nothing wrong with that. And I would rather somebody say, ‘I’m a lab person. I'm not going to work a shepherd.’ Because then you get a mismatch. This is not going to work out...*

*I was actually just working today with a teammate who has a golden [retriever] and everybody expects goldens to be all loving and fun and kissy and huggy. And this one is not. Because they forget, goldens are hunting dogs, so they have that aspect in them as well... But she's like, “but this is a golden retriever” and she's very quiet and laid back. But your job is to handle THAT dog. And to speak up for that dog. When somebody asks if they can pet him, the answer is not ‘Oh, I'd rather you not’. The answer is ‘No, you may not’. And you don't have to give a reason. I think that's part of something I've learned over the years. My first German Shepherd, I took to PR events all the time, she would tolerate anything. I'm not saying she necessarily enjoyed it. But she tolerated anything and everything. I trusted her around little kids laying on her, petting or doing whatever. My next one, no way. And I came to terms with the fact that they're not PR dogs. They're working dogs. That's their job. They don't have to represent the team or the breed or search and rescue through PR. And I've just gotten the attitude that my job is to protect my dogs. They're not the kind of dogs that want to be hugged on or petted.*
Similar sentiments were expressed by handlers on the other side of the debate. Some dogs that are initially “bred for” a particular job turn out to have different interests and abilities, which it is up to the handler to accommodate.

Team Floppy-eared:

One handler who came down on the “floppy-eared” side of the debate was Kim, who we met earlier in the virtual interview vignette. She prefers Labradors and stated that it was not so much the personality but the “look” of shepherds that she did not like. “I think the shepherds kind of slink around, it’s something about the way they move”. Instead, she prefers the personality of Labradors. But, like Rachel, when Kim began to describe her yellow lab, Tucker, she ended up explaining that not only does he not conform to the personality traits she expected, but that he deviated so far from the expectation that he had to have a career change: “I think the floppy-eared are a little bit more goofy and can be just as intense. Tucker isn't. Some of that I think was his breeding. Some of it is how he was trained. You know they just tried to get it out of him.” Kim was referring to the fact that Tucker was originally selected to be trained as a guide dog for people with visual impairments, but he “washed out” of training because when it came time for him to learn tasks like opening drawers, he would not stop pulling them off the hinges and trying to sling them around to play with them. While this level of “toy drive” is a highly desired trait in SAR dogs who are expected to be motivated by play, it is less useful to a person dealing with a disability.

Kim continued:

*I just was over at [guide dog organization] this last week because his puppy raiser, came into town and stayed with us actually for the weekend... And so I was talking to some of the trainers and they're like, “Oh, yeah, we remember Tucker. He was one of a kind”. (laughing) They still have some drawers that don't work well, that he pulled out all the
hinges. They just couldn't get him not to tug, which is of course what we like... I'm a psychologist and he goes to work with me every day which is great and because he came so perfectly trained, obviously, I went and got his Canine Good Citizen and got him tested and registered as a therapy dog. I mean, why not? He already came knowing 40 words. So he has a big-time off button and then obviously a big-time on button. So he goes to work with me every day, pretty much goes everywhere I go, which is nice.

Like Rachel, Kim described the dog as an individual, affirming their personal relationship as the most important factor, ultimately deciding that what works best about Tucker is that he is versatile enough to be able to be with her all the time, at work and during her volunteering. The opportunity to spend productive time together was of the most value for Kim, rather than particular breed-based skills. And according to her husband (another SAR volunteer), Tucker does not much care to spend time without her either, waiting impatiently at the door for her to return home whenever she leaves without him.

The experiences as related by handlers in this study, were consistent with the assertion that, particularly when it comes to temperament, within-breed differences are substantial and to be expected. Rather than breed standards, handlers emphasized their relationships to the dogs as individuals and asserted that it is the responsibility of handlers to manage (mis)perceptions about the dogs’ temperaments. In a study of perception of dog personality based on photographs of dogs that had been manipulated in various ways, one of which was to have either floppy or pointy ears, Fratkin and Baker (2013) found that participants judged dogs’ personality characteristics based on ear shape, attributing higher levels of extraversion and lower levels of agreeableness and emotional stability to pointy eared dogs compared to floppy eared ones. Further, the notion that Golden Retrievers, Labradors and German Shepherds are “supposed to” have particular personality traits can result in dogs being placed in jobs or situations that are uncomfortable for them. Unfortunately, breed stereotypes continue to influence breeding and
selection of working dogs in some circles with consequences for the dogs’ health and for the reputation of dogs who are members of breeds that have unfortunate social histories with human populations.

**Public Image: A Friendlier Reminder from the TSA Not to Pack Explosives in Luggage**

During a trip to Europe to observe a mission readiness test for European disaster teams organized by DRDN’s Swiss partners, some members from DRDN and I noticed a white German Shepherd Dog in training. When I walked over to get a closer look, multiple handlers made the same comment: “That dog won’t be able to pass [the certification test]”. Surprised, I asked why they thought so. They had plenty of successful German Shepherd dogs on teams in their own organizations. Yes, they explained, but this was a white German Shepherd. That is different. Nakamura-san pointed to his head and said “there’s nothing in their heads”. It is the same problem with the standard German Shepherd lines in Japan, he explained. To get good quality German Shepherds, they have to import and breed ones from foreign working lines because the ones in Japan are show lines that are bred for their looks.

The fact that aesthetics and ability are not necessarily correlated does not mean that looks are unimportant to handlers, though. Some German Shepherd handlers commented that one reason they preferred the breed was that they “look like police dogs”. Saito-san, one of the younger Japanese handlers, admitted that this was his main reason for preferring German Shepherds. It’s not complicated, he said. They look cool. Saito-san drives a Jeep with assorted added upgrades and German Shepherd Dog stickers attached (handlers in the United States also tended to adorn their vehicles with stickers representing their favored dog breeds). And I had to agree that his beloved German Shepherd, Sasha, does -subjectively - look cool sitting in the back of that Jeep. As Anna put it, they have a certain “wow” factor that influences handlers’
preferences, sometimes prompting them to purchase and train dogs that are less suitable for the job (and potentially aggressive) instead of working with other capable breeds.

In a later interview with Brandon in the United States, he also referred to the tension between selecting for image and ability, critiquing the problem of selective breeding based on arbitrary and superficial preferences. It is well-established that “in-breeding” within pure-bred lines has produced a number of unfortunate health conditions for “pure bred” dogs (Norton et al 2019). One of the reasons that some floppy-eared proponents provide for their preference is the unfortunate tendency of German Shepherds to develop hip dysplasia as a result of selective breeding for their “characteristic” sloped back and short hind legs, which are bred into them purely for aesthetic reasons.

Brandon suggested that these problematic breed selections are not just driven by “breeders”; it is driven by handler preferences, and unrelated social problems, too. He noted the statistics that certain breeds tend to do well at search and rescue, but acknowledged that there are plenty of others that would be just as capable; the reason they are less popular has more to do with image than ability. Below is an excerpt from notes taken during the interview in which Brandon criticized the habit of selecting dogs for aesthetic or other social reasons, which over time leads to negative outcomes for some dogs and handlers:

The way you get a chocolate lab, you have to line up every recessive gene available. People want the chocolate because they look cool and they don’t shed as much. This is why you don’t see a lot of chocolate labs in working jobs except hunting...White shepherds have different issues. They are possessed. They were thought for many years to be devil dogs and were killed in litters. So the white shepherd gene pool didn’t develop and mature like the others. For hundreds of years. Finally now we aren’t killing them. They’re not Gandalf, they’re just a white shepherd. But you don’t see a lot of them because they’re not bred as much.
Same with standard poodles. They are the smartest dog out there. But oh my god, who wants to use a standard poodle on a search? (Laughing) They have a pretty good nose and I’ve seen them used as search dogs. But people pick the dog as a statement. If you rescue a dog, that’s your statement: ‘I took a dog who needed a job and I saved his life’. Other people pick a dog because they want to be different.”

These narratives would suggest that, for largely arbitrary reasons, some breeds with good capabilities are consistently ignored while others with problematic social or behavioral traits are selected instead. When it comes to public image, this is a particularly problematic issue for German Shepherd Dogs who belong to a breed that has a long and somewhat unfortunate social history that impacts its public image, particularly in regards to race relations in the domestic United States, and in the imperial/colonial histories of the USA, Europe, and Japan.

That dog breeds are “inextricably interconnected to state formation, class structures, and national identities” is illustrated by Skabelund’s detailed social history of the German Shepherd Dog, which I will briefly summarize (Skabelund 2008). Skabelund calls attention to the fact that the science of animal breeding was historically connected to the eugenics movements of the late 19th and early 20th centuries, when certain dog breeds became identified with racist political regimes and, as nationalist symbols, were endowed with exceptional and “pure” characteristics such as loyalty or bravery. Thus, the German Shepherd became the exemplar of racial purity in the Nazi regime in Germany and was integrated into a number of high-profile and violent roles including war fighting, paramilitary and police organizations, and guard duties at POW and concentration camps. German Shepherd Dogs also spread globally during wars of imperialist expansion and became symbols of oppression in those contexts. They were imported in large numbers by the Japanese during the pre-war and WWII period and were re-imagined as both “German” and “Japanese”, feeding racist ideologies of superiority. They were similarly deployed
in war efforts and colonial projects in East Asia, usually in roles related to suppressing or intimidating colonial subjects\textsuperscript{25}. In the United States, German Shepherds are better known for their role as “police dogs”, but this role also has a troubling history of racist ideology. They were famously used to suppress civil rights protests by black activists and have been associated with military abuses such as the torture of prisoners by U.S. Forces at Abu Ghraib in Iraq (Skabelund 2011).

Although Skabelund notes search and rescue as one of the German Shepherd dogs’ more well-known “benign” roles, the more violent reputation of the dogs remains prominent in the public imaginary. It is in this context that, during the course of this study, the TSA (Transportation Security Administration) weighed in on the pointy-eared/floppy-eared debate. The TSA is the agency responsible for, among other things, airport security in the United States. They use canine teams trained in explosives detection to search for explosives and to “deter terrorism” in airports. Explosives detection work is a different specialty of scent work that is not fundamentally unlike canine SAR, except the dogs search for scents associated with explosives rather than those of humans, and tends to employ working dogs from similar breeds. In fact, one of Mori-san’s dogs came from the same litter as another dog that worked in explosives detection for airport security in Japan. She still goes and visits him at his kennel sometimes.

In 2019, a TSA spokesperson reported that the organization was beginning to transition their teams to floppy-eared dogs, in response to the social perception of pointy-eared dogs, such as the German Shepherds, as “ominous” and tending to scare children. This perception, they said, was at odds with the “friendlier” image the TSA wanted to project with the floppy eared dogs,

\textsuperscript{25} The Army Dog Memorial Statue displayed at the controversial Yasukuni Shrine in Tokyo is a German Shepherd Dog. More on this in Chapter 5.
especially when they are involved in passenger screening. They decided to stop bringing on new pointy eared dogs and would strive to replace retired dogs mainly with floppy-eared recruits.

It is important to note that this discussion takes place during a moment of sustained popular critique of law enforcement in the United States particularly in regard to the disproportionate use of force against minority populations, popularized by the Black Lives Matter movement and related protests of police shootings and racial disparities in enforcement. This critique has included commentary on the continued use of dogs – specifically German Shepherds and Belgian Malinois – to suppress peaceful protest, specifically by minority groups, as part of an uninterrupted pattern of racist enforcement dating back to at least the 18th century (Parry 2020). In fact, some historians of policing in the United States locate the beginnings of the formal system of policing in the “slave patrols” of the early colonies which employed organized teams tasked with protecting the property of slave owners by engaging in nightly patrols on horseback to search with dogs for slaves attempting to escape (Brown 2012). In discussions of the development of community oriented policing policies, Williams and Murphy (1990) further argue that minority perspectives, particularly on the long history of racism, have been left out of subsequent developments in professional policing strategies and that minority communities received fewer of the benefits of policing. Indeed, a 2006 study of police dog bites in Los Angeles in the 1990s found that most people bitten by police dogs were minorities (black and Hispanic) and that resulting injuries required more serious medical treatment than was suggested by proponents of the use of police canines for enforcement (Meade 2006). While TSA and SAR canines are not the specific targets of these critiques as their primary functions do not include biting, they nevertheless are affiliated with law enforcement and, in the case of SAR dogs, routinely deploy alongside local police during search operations so that they interact with the
public in the course of police contacts. Recall, that some volunteer SAR teams in the United States are employed as formal members of sheriff’s departments or federal agencies within the Department of Homeland Security (e.g. FEMA) and may be involved in searches resulting from not just natural disasters, but human-made events such as terrorist attacks or other crimes. Given these considerations, and the decided lack of racial/ethnic diversity within SAR teams that was noted by several U.S.-based participants, I argue that the implications of popular perceptions of pointy-eared dogs in government service is a salient concern for SAR teams and may play a role in shifting preferences of SAR handlers toward floppy-eared partners in the United States.

To return to the concept of interspecies intersectionalities (Weaver 2017), the shift in TSA policy toward selection of floppy-eared breeds would, at first, appear to be a long-needed acknowledgement of the possibility that different working dogs in government positions may affect citizens in different ways depending on a variety of social factors, such as the history of German Shepherds being used for suppression of dissent and intimidation of marginalized people and their propensity to be used in bite work. However, the TSA spokesperson emphasized that friendlier-looking dogs did not mean that passengers should now try to “meet” the dogs while they are working; instead, handlers are issued baseball-like cards featuring the canines to hand out to curious children and adults (Giaritelli 2018). So it is not necessary that bomb-sniffing dogs actually befriend the public or behave in a friendly manner, just that they look as though they might. It remains to be seen whether the response of law enforcement and law-enforcement-adjacent canine organizations to public demands for substantive procedural change will be more than a superficial one.

The selection of dogs that are intended to project a “friendlier” public image for a relatively unpopular government organization that is engaging in airport security and terrorism
deterrence is a policy decision that struck some canine handlers as impractical and unjustified. One European handler opined that the social impact of the TSA’s decision for humans is not the same as the biological impact it may have for dogs, who work with humans in other contexts. Depending on the job specialties of the canines in question, she worried that there could be a risk that a decision to employ - and presumably breed – floppy-eared dogs in positions usually occupied by pointy-eared dogs could lead to breeding aggressive tendencies into the floppy-eared lines. For example, if they were going to be used for security, it would be better to use the dogs that tend to be more aggressive rather than selecting for aggressiveness within dogs that tend to “look” friendlier. The dogs mentioned in the TSA announcement were primarily described as tasked with screening passengers and baggage, which would not require aggressiveness. But according to the TSA Canine Training Center Factsheet, TSA dogs are intended to be a “visible deterrent to terrorism”, an admittedly vague description but not one that sounds especially “friendly”. The handler expressed concern that there is already a problem that aggressiveness is being “bred into” Labrador lines. To breed working dogs for “looks” based on the social situation in one country, can have consequences for handlers internationally who acquire working dogs from the same breeding lines. This point recalls Haraway’s assertion that the social and biological history of humans and dogs are inextricably bound up (Haraway 2003), and highlights the difficulties involved in attempting to ensure social justice for both humans and non-humans engaging in complex relationships enacted at global and local scales.

Let the Dog Work

In learning to deploy effectively with a canine partner, SAR handlers are often reminded of the need to “let the dog work”. This refers to the tendency of some handlers to try and micromanage or rush their dog through search areas rather than letting the dog use their own
abilities to solve the problem. Failing to let the dog work on their own can result in a dog being rushed past something important by an impatient handler or becoming overly reliant on a handler rather than working independently, which will lessen the efficiency of the search team. This point was illustrated during a training exercise in Europe in which Linda and Agatha were giving a course for team leaders to learn how to recognize and correct problems in search operations or teamwork in dog-handler teams during large-scale coordinated search efforts. Agatha pointed out a problem during an exercise on a rubble pile in which a handler was staying too close to their dog so that the dog was constantly looking to him and would not search areas on his own. She identified this as a teamwork issue in which a handler stays too close and pushes the dog, providing too much instruction and interference. She suggested that a team leader should notice this and suggest to the handler to “let the dog work” by striving to give the dog more space and avoid distracting the dog while they search. Agatha reminded participants that a handler’s job is not to search for the dog but to support the dog and help them if they need it - not get in their way.

Attempts to micromanage and impose unhelpful assumptions onto their work is similarly a problem encountered by K9 SAR organizations that rely on support and cooperation from government entities, public donors and volunteers, and international partners, all of whom may have conflicting preconceptions about SAR dogs. Rather than letting the dog teams work, public policy and popular opinion can push unhelpful and conflicting assumptions, stereotypes and goals onto the work of SAR teams, preventing them from achieving optimal results. I will now provide some examples in the Japanese context in which SAR teams encountered bureaucratic obstacles in the form of customs and immigration policy, city zoning and ordinance issues, and
public misunderstanding of how working dogs work. I argue that these difficulties were exacerbated by the “foreignness” of the SAR dogs in question.

When I moved to Japan to begin fieldwork, my research assistant, Snow, did not accompany me in person. Little did we know that I would not be doing all of my research in person, either, after the COVID-19 outbreak intruded. But it was a different virus that kept Snow out of Japan: rabies. Having completely eradicated rabies in the 1950s, Japan has some of the most stringent immunization and quarantine protocols for domestic dogs entering the country (Kurosawa et al. 2017). Those same rules are partly responsible for the growth of volunteer search and rescue teams in Japan. They apply not just to pets but to foreign search and rescue dogs, too, even if they arrive to assist with disaster response. Because it takes several months and a specific series of recent rabies vaccinations and negative rabies tests to qualify a dog for entry into the country without undergoing a lengthy quarantine period, even dogs that are current on all vaccinations would technically not meet the requirements for entry in the case of a sudden, unexpected disaster in which the first 72 hours are the most critical for locating and rescuing victims.

After several canine SAR teams were delayed at the airport for an extended period of time while trying to assist with disaster response following the 3.11 earthquake/tsunami/nuclear accident in Japan, the need for greater international cooperation and knowledge transfer among disaster response teams became apparent (Goldman 2011). Thus began a partnership between DRDN and an international NGO in Switzerland that engages in capacity building and knowledge transfer to help local disaster search and rescue teams increase their readiness to respond rapidly to large-scale disasters.
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<th>Step</th>
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<tr>
<td>STEP 1</td>
<td>Microchip (identification)</td>
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<td>STEP 2</td>
<td>Rabies vaccination (1st) *at least 91 days old</td>
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<td></td>
<td>30 days or more ~ before the 1st vaccination expired</td>
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<td>(the date of 1st vaccination is day 0)</td>
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<td>STEP 3</td>
<td>Rabies vaccination (2nd) *at least 30 days after the 1st vaccination and</td>
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<td>before the 1st vaccine expired</td>
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<td>180 days or more (The date of blood sampling in day 9)</td>
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<tr>
<td>STEP 4</td>
<td>Rabies antibody test *equal to or greater than 0.5 IU/ml</td>
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<td>STEP 5</td>
<td>Waiting period *not less than 40 days before arrival</td>
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<td>Expiry of 2nd rabies vaccine</td>
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<td>Pre-export inspection</td>
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<td>STEP 7</td>
<td>Obtaining certificates</td>
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<td>STEP 8</td>
<td>Import inspection</td>
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Table 4.3 Flow chart outlining the lengthy procedure for importing foreign dogs into Japan, provided by the Animal Quarantine Service, Ministry of Agriculture, Forestry and Fisheries

Pursuing public image at the cost of effectiveness

The push to develop the capacity of domestic canine SAR organizations was met with a boom in public awareness and donations after the 3.11 disaster, according to DRDN members. However, the same enthusiasm was not found in state policy revisions that would promote greater interoperability. For instance, the immigration rules restricting the timely entry of foreign
SAR teams were not relaxed after the 2011 incident to provide for easier entry in cases of emergency. Table 4.3 shows a flowchart provided as part of a 24-page document outlining the complex requirements for dogs entering Japan, which remained in place as of 2018 (Ministry of Agriculture 2018).

These restrictive immigration rules that limit the ability of foreign SAR teams to enter Japan stand in contrast to state policy that simultaneously encourages the expansion of Japanese SAR teams’ capabilities to deploy internationally (personal communication - Japan Foundation, 2018). Under the Japan Disaster Relief Law, Japan dispatches search and rescue teams to major disasters overseas with a focus “particularly in developing regions”, including the 7.1 magnitude earthquake that struck Mexico in 2017 (Ministry of Foreign Affairs of Japan, 2017). As is typical of international SAR teams, these teams include canine SAR teams which are provided by government agencies including the National Police Agency, not local volunteer groups. Nevertheless, despite the lack of resources for adequate domestic deployment, these costly international efforts are publicized by the involved government agencies to the annoyance of local SAR volunteers who consider themselves to be taking on the responsibilities for domestic preparedness without adequate support from government agencies. Although counterintuitive, these policy goals are consistent with the findings of Watanabe (2013), whose analysis of volunteers in Japanese NGO's reflects a view of work on international development projects by Japanese actors as a way to activate dreams of redemption and modernity in a context of a sense of prevailing national crisis post-3.11. Additionally, Leheny’s (2003) study of state involvement in encouraging citizen’s leisure activities as a way of striving to fit in with “modern” industrialized nations may also explain these efforts to publicize the development of capabilities
to provide aid to “developing nations” while making it more difficult for teams from other
industrialized nations to provide the same aid to Japanese citizens.

A Japanese handler discussed at length his irritation with the unwillingness of the
government to take responsibility for protecting the lives of Japanese citizens affected by
disasters:

At a minimum, the government must fulfill the obligation to protect the lives and property of the people. In the event of the nuclear accident, government officials tried to get people returning home to protect their property to write a pledge that "it is my responsibility even if life or health is harmed." This is the act of the government relinquishing its responsibilities and forcing people to choose between life and property. Of course, there are situations in which both cannot be protected at the same time, but at least in a nation that advocates democracy, I think that such coercion should not be carried out.

He further commented that these efforts must be ongoing, fully considering “the rights of every citizen not just after a disaster occurs, but in normal times”. However, despite the fact that volunteer SAR teams are commonly the only resources available to provide canine teams to assist police and fire departments with searches for missing people or responses to minor local floods and earthquakes that require emergency services, these teams often find that their efforts at developing capacity to perform these tasks are hampered by cumbersome city ordinances and bureaucratic red tape.

The problem of lacking opportunities for training SAR dogs in the ways necessary to build the capacity to respond to large-scale disasters was especially evident when handlers were forced to justify training decisions to their European partners who had easier access to such training opportunities in their own countries. For example, during an annual week-long training retreat at the disaster preparedness training facility in Hyogo prefecture, Anna and Agatha flew in
from Switzerland to provide training, advice, and instructional material to DRDN handlers. Every
evening after training, there was a lengthy team meeting between DRDN members and the Swiss
guests to discuss opportunities for improvement. These meetings would eventually bleed into
an informal conversation and discussion that lasted well into the night. During one such session,
Tanaka-san produced a photograph of an old school building that had been abandoned and
would soon be made available for SAR training. He explained that that school, along with
two other abandoned schools nearby, are scheduled to be destroyed in ten years. In the meantime,
they have no other purpose. DRDN gained access to one of them for training, but they do not yet
have access to the other two because there are houses nearby and the Japanese government is
strict about rules regarding noise and barking. Additionally, only very limited alterations could
be made to the structures or grounds, which would limit the organization’s ability to create
realistic training areas and rubble piles. Anna stated matter-of-factly that DRDN should get
access to all three buildings and use them all, and that Saturday afternoons should be fine since
people can be indoors and would not be disturbed. Tanaka-san and Kimura-san explained that
this was not possible because the rules are very strict. Anna retorted, “Well they may be strict
about barking, but when people are buried under rubble, they probably won’t mind the barking”.
Tanaka-san laughed heartily at that comment, but despite the next few month’s efforts by
Tanaka-san and other members of the team to meet with city officials and gain additional
permissions, the restrictions were not lifted.

One handler opined that part of the problem with working with city governments such as
this one is that they like the idea of being able to say that they support search and rescue dog
training in their city in order to build their reputation, but they do not understand nor have any
interest in doing things that will actually result in SAR dogs becoming capable of responding to
serious emergencies. Anna attempted to advise the organization’s leadership on how to navigate dealings with politicians but, after meeting with city officials personally, she noted with frustration that the city services did not appear to understand that the capabilities of search dogs were superior to any of their existing methods for search and rescue.

Kimura-san noted that this problem extends to the general public as well, resulting in DRDN expending inordinate amounts of time on demonstrations and public education focused on the one hand on convincing government agencies that they are serious, capable working teams while simultaneously struggling to convince the public that the large, “scary-looking” working dogs are safe and friendly. After all of these efforts, there is hardly any time left to train with the dogs to actually do the job for which they are attempting to gain support.

The contradictions can be frustrating. Even though many trainers advised against excessive obedience training for SAR dogs, since their ability for independent thought and action is necessary for search effectiveness, Kimura noted that members of the general public are not used to being around such large breeds of dogs, especially German Shepherds which are regarded by many people as scary. They expect to see demonstrations of complete obedience from the dogs. “Usually, we have to show people how good and how different they are from people’s pets. That’s why we have to train so much dog obedience. It’s so that people will recognize this is different from a pet. At the same time, we are collecting the money.”

Despite efforts to educate the public about working SAR dogs, volunteer-based organizations still rely on funding through donations. Much of the fundraising at public events is accompanied by allowing members of the public to meet the SAR dogs by crowding around them and petting them in the same way that they might interact with a pet. Kimura noted that some donors seemingly refuse to accept that the SAR dogs are not in need of pet supplies that
they imagine would be appropriate for their job but are, in fact, not. For instance, every year some well-meaning donors gift DRDN with donations of supplies such as dog booties intended for the protection of the dogs’ feet. In practice, SAR dogs do not normally wear such booties, except in rare cases such as sustaining an injury to a paw, because the booties impede their ability to use tactile input from their paws to safely navigate on unstable surfaces. Nevertheless, some donors insist on sending these pet supplies despite being told that the items are not needed by working dogs.

The people think it's so dangerous to not have shoes on and then some people will call us send the shoes to us. They sent 50 shoes for us. We can’t use the shoes. And they'll send us the shoes every year...Somebody paid a great amount of money. Not to us. Thank you for the very nice shoes. But shoes are not good for the dog. This isn't what we needed.

Fig 4.2 A SAR dog, Gracie, wears a donation collection box on her harness while greeting members of the public after a demonstration
SAR Dogs are not Stuffed Animals

Unlike other parts of the “animal care” sector such as animal shelters, which are often associated with foreigners in Japan, canine search and rescue is not. In her dissertation on animal rescue volunteers in post-disaster Japan, Mattes remarks on the tendency among Japanese to construct volunteers at animal rescues as dirty and foreign, regardless of their actual ethnicity, associating them with the “stray” animals who they care for. She further notes that many volunteers at these organizations are in fact foreign. While this caused some difficulties for organizations and volunteers attempting to operate in Japanese society, Mattes describes how volunteers’ identities became deeply entangled with the animals they cared for and became highly critical of what they viewed as the rest of society’s distressing views toward animal care, such as purchasing pets from pet shops and dressing them up in baby clothes (Mattes 2018).

In contrast, canine SAR volunteers in this study were almost entirely ethnically Japanese. Yet their dogs were almost entirely “foreign” breeds, such as German Shepherds and Labradors, and the trainers tended to have exposure to foreign training methods and practices. They also expressed disgust at some of the same attitudes noted by Mattes concerning the treatment of animals within Japanese society, such as dressing them in outfits and carrying them around “like stuffed animals”. This trend in Japan has been referred to as an 'anthropomorphic paradox' in which well-intentioned pet owners treat their dogs so much like little humans that their welfare suffers as a result of being infantilized and forced to live as if they are human children - wearing clothes, riding in strollers, and generally being prevented from behaving naturally (Atherton and Moore 2016).

Japanese handlers in this study rarely selected dogs that are generally popular among other Japanese pet owners. In fact, they often explicitly distanced themselves not just from popular pet
breeds but also pet-keeping practices in general, frequently complaining that the typical pet owner does not treat their dog with appropriate care or respect. For instance, Kimura-san and Nakamura-san (both of whom work with SAR Labradors) described their impressions of pet owners who engage in sports training with their dogs as selfish and, in some cases, unethical in that they appear to treat their dogs as a means for winning pointless awards for selfish ends and that they push the dogs to work too hard without taking into account whether the dogs are enjoying or even tolerating the experience. Another handler similarly remarked that a good handler knows to “train your dog to the extent that it's fun for the dog, and don't train it for your own self-satisfaction”.

Of course, DRDN is a non-profit organization and, as such, some allowances for the prevailing public opinion were certainly made in terms of appearances at those events, such as Lily-chan, the white and grey dog pictured earlier in this chapter. She is not a working dog but is allowed to do PR work for the team by attracting the attention of adoring children and adults who want to meet her. But the other dogs are represented as the ones who do the actual work. And generally, handlers rejected the idea of actually doing serious work with small breeds, especially Japanese ones.

Whereas Japanese handlers remarked on similar issues as those mentioned earlier in this chapter regarding breed selection - ability, personality, looks - there was an additional consideration for many of them: the need to mark oneself as serious. In a transnational industry that is not entirely compatible with Japanese social institutions, foreign breeds marked a handler as serious and capable, not frivolous pet owners who carry dogs like dolls in baby carts. However, the insistence on working with the larger breeds, such as retrievers and shepherds,
tended to set SAR handlers at odds with public perceptions and municipal rules about how dogs and their people should behave.

**Equal Opportunity for Chihuahuas**

The stark contrast between what handlers regarded as doing legitimate work with dogs as opposed to objectionable pet-keeping practices was nowhere more apparent than in discussions about SAR handlers who did not demonstrate proper seriousness of purpose in their training, which was reflected in their selection of a SAR dog. In 2010, a 3-pound Chihuahua named Momo briefly became something of an internet celebrity when she and her handler successfully completed a certification test to volunteer for the police volunteer search and rescue unit in Nara, Japan. Officials noted that there was technically no breed requirement and some headlines referred to the incident as an example of canine “equal employment opportunity” (McCurry 2010), suggesting that any dog had the potential to serve as long as they worked hard enough to achieve certification. Several Japanese handlers commented on the parallel they observed between parents pushing their human children to perform well on stressful school examinations and pet owners pushing their dogs to pass all sorts of certification tests, regardless of the owners’ fitness for participating in the activity as an able partner.

Obviously, Momo-chan is an unusual case. When I asked Tanaka-san about dog selection, he was less than impressed with the “achievement” of dogs like Momo-chan. During a conversation over dinner after setting up the abandoned school facility for the upcoming weekend’s training exercises, Tanaka-san related the following:

*The image is that women keep dogs. And so they are the ones who get interested in training. They want their aiken to be rescue dogs, but these “mama-sans” are not actually qualified to go on a real mission... To go on a real mission the dogs usually aren’t aiken to start with; they come from Germany, for example, or are specially bred.*
The “mama-sans” who do the training (even in DRDN) just want to take cute pictures of their dogs and have “aiken club”. They might try to use Japanese breeds, but labs and shepherds are good. And maybe malinois. The Japanese breeds are either too small or too lazy or not the right temperament to get along with victims or they are too hard to train.

This opinion is represented in the breed breakdown of DRDN. Handlers who are regarded as serious have foreign dogs; handlers who want their “aiken” rescue dog to do SAR are not. Although I heard about the “mama-sans” and their aiken to whom Tanaka-san referred periodically, and indeed the news story of Momo the police search chihuahua was part of what had originally piqued my interest in this topic of study, I rarely saw them in action. Perhaps this is because they did not engage in the type of training regarded as compatible with the mission of DRDN. It is also possible that owners of Japanese breeds and other popular pet breeds were simply discouraged from participating in serious training because their dogs, although capable, did not fit the image the organization intended to project.

I recorded one instance in my field notes of a DRDN training exercise that was attended by a handler who trained with small Japanese dogs, known as Kai ken. Not be confused with “aiken”, the Kai ken is a hunting breed that looks similar to the popular Shiba inu, except Kai ken have a brindle coat and “unlike shibas, they can actually do SAR work”, according to handlers.

This training took place in a warehouse full of machinery, equipment, and piles of assorted debris, which the organization had gotten permission to use on weekends when workers were not present. Each dog-handler team took turns searching the warehouse for a hidden “victim”. The “victim” would hide in different locations depending on the skill level of the team. They might be crouched down behind a piece of large machinery right inside the door for a
beginner team, or on top of a raised platform on a piece of equipment or in a room behind a closed door that had been covered up with debris for more advanced dogs. Once the handler gave the command to search, the dog would rush in and search the warehouse. If they found the “victim,” they would bark to alert their handler and receive a reward. If the younger dogs struggled to find the “victim”, they might get some clues in the form of the “victim” making some noise. Some dogs practiced climbing up ladders and walking on unstable surfaces.

In any case, it was important for the dogs to be given tasks that were challenging so that they could incrementally improve their skills, but not so challenging that they would not be able to successfully complete them and become frustrated. Even though search teams such as DRDN are most commonly called up for missions involving missing people in more mundane settings, such as hikers lost in the woods or people missing after a minor flood or earthquake, the goal of the team was always to improve their capabilities so they could be prepared to respond to any size of disaster up to and including those that involved collapsed buildings and rubble. The opportunity to train in a location that could mimic at least some of those conditions was a top priority and a reminder of the seriousness the teams brought to their craft.

I could tell little difference in the performance of the Kai ken teams compared to the others but, as I am not a dog training expert, I am unable to comment definitively on that point. Some time later, the Kai ken handler split with DRDN to join a different organization for what were described as fundamental disagreements over organizational mission. Most of the subsequent trainings were attended by handlers with German Shepherds and Labradors. However, this was not the last time that I witnessed an apparently capable Japanese working dog rejected as undesirable for serious work. In fact, I noticed that some handlers went out of their way to distance themselves from Japanese breeds or other breeds popular among pet owners.
During the mission readiness testing event I attended in Europe with DRDN members, we encountered a wide range of dog breeds training in SAR. In addition to the expected German Shepherd Dogs, Labradors and Retrievers, there was a respectable showing of various other breeds including border collies, spaniels, and even a Japanese spitz. The Japanese spitz is a small dog with a fluffy white coat that looks somewhat similar to a Pomeranian. The breed was developed in Japan in the early twentieth century. Agatha proudly pointed out the spitz team to the Japanese handlers and periodically reported on the team's progress in the training exercises, apparently assuming the Japanese handlers would be pleased to see a successful team that included a "Japanese" dog. But far from proud, the Japanese handlers were, if anything, bemused by the spitz's participation. Afterwards, they joked about the extremely fluffy (ふわふわ fuwa) appearance of the small dog and made high pitched yipping sounds to imitate her “cute” alerting behavior. Despite the dog’s successful completion of the rigorous training and testing events, she was not recognized as a serious SAR dog by the Japanese handlers.

I suggest that just as preferences for pointy-eared or floppy-eared dogs among U.S. handlers derive in part from considerations of those breeds’ differing social histories in government service and their appearance as “cool” or “scary”, similar considerations may have influenced Japanese handlers’ preferences for both pointy and floppy eared foreign dogs as opposed to more common local options. The almost exclusive selection of German Shepherds and Labradors by Japanese handlers, rather than other working breeds more commonly found in Japan, may have less to do with the dogs’ abilities than it does with considerations of image and stereotypes associated with those breeds as representative of foreign expertise, military and paramilitary power (in the case of shepherds), and seriousness of purpose. This selection bias mirrors government efforts to project an image of a “modern, industrialized” nation positioned to provide
international aid (such as the European teams that attempted to assist after the 3.11 disaster) rather than to receive it. But these efforts are in some ways counterproductive to capacity building as the foreign breeds are more difficult to accommodate in a society accustomed to smaller dogs that are treated as human-like companions. The difficulty of finding housing with adequate space and permissions for larger dogs was particularly pronounced for Tokyo residents, who explained that they generally were forced to travel far outside of city limits to find spaces for their dogs to even exercise, much less train. Additionally, the SAR dogs and their particular capabilities and needs were not well-understood by the pet-keeping public who are the primary source of volunteer and financial resources for fledgling SAR organizations.

Learning to Dance at the Inu matsuri (Dog festival)

I will close with a brief illustration of the stark difference between the treatment of pet dogs and working dogs in Japan, although it should be noted that such differences were also observed in the United States and Europe. Understanding the way in which handlers actively engage with SAR dogs as non-human partners, as opposed to juvenile human surrogates, is key to understanding the theme of this chapter. “Letting the dog work” necessitates a style of engagement that recognizes the working dog as a separate, autonomous entity that is capable of acting in correspondence with a human partner rather than merely passively receiving material or symbolic anthropomorphic baggage in the form of expectations about breed stereotypes and social expectations.

Having heard so much about the differences between the training practices of DRDN SAR handlers compared to those of the “typical” pet-owners or other dog sports enthusiasts, I visited an inu matsuri (dog festival) at a dog park just outside of Tokyo to try to gain a better understanding of pet-keeping practices. It turned out to be exactly as described. Several women –
and some men - pushed baby carriages containing shiba inus, pomeranians, miniature schnauzers, miniature poodles, and various other toys breeds wearing full body outfits, including tiny replicas of the summer yukata worn by some of the human attendees. When I arrived, a pack of aiken were being painstakingly posed by their owners for a photo opportunity at the park entrance.

![Image of pet owners posing dogs for photos at a dog festival](image)

*Fig 4.3 Pet owners pose their miniature breed dogs for photos at a dog festival*

Without a dog at the outset, I felt a bit like an adult who visits a children’s playground without a child, and received more than a few disapproving stares. Fortunately, I happened to run into Suzuki- sensei and Charlie. Suzuki-sensei was a friend of Mori-San and was a well-respected trainer who had won international competitions in protection work and occasionally provided training for DRDN handlers. Her dog, Charlie, can only be described as an extremely large and majestic German Shepherd from the European working line, not a show line. Suzuki-
Sensei and Charlie were running one of the activity stations at the festival, giving away colorful children’s water balloons and making friendly public contacts.

Aside from being full of people with small dogs wearing cute outfits, the festival was similar to other summer festivals. Tents and booths were set up with children’s games, vendors selling dog-related merchandise, food and drinks. There was access to a fenced dog park area for off-leash play, and another area with games for owners to play with their dogs. Later in the evening Taiko drummers took over the live music performance and people began to gather in the central grassy area designated for performing a stylized dance with choreographed movements typical of Japanese summer dance festivals known as bon odori. But in this version, the dogs - who clearly had not been briefed on the dance steps in advance - were carried or dragged along by their owners as they performed the movements in a large circle around a central scaffolding. The dogs that were small enough to carry were hoisted into the air and sometimes their paws were manipulated to match the drum rhythm or to mimic dancing. The ones that were too big to carry were pulled along on their leashes which would periodically tangle around their owners during the dance steps that involved spinning in a circle. Suzuki-sensei and I participated in the dance, but Charlie did not.

The whole affair bore not the slightest resemblance to any activity I had witnessed at a SAR event. It was a stark contrast indeed, considering the dog festival took place in the same park in which we had conducted a team training and testing event run by Suzuki-sensei a few months earlier. The test had involved another kind of complicated, stylized routine in which the dogs demonstrated their ability to follow a handler’s vocal or hand signals to run, sit, stay, stop, come, bark and walk in a series of specified directions in addition to searching for a hidden “victim” in concert with their handler. The team would receive points for working together and
performing the movements as described; a high enough score meant they had passed and could be certified to operate as a team on certain types of missions. The routine was not unlike a dance, except it was one that both partners knew how to participate in.

The jarring contrast between the two events reminded me of Ingold’s (2016) concept of “correspondence”, which refers to different parties “carrying along together” in time while still being distinct from one another. Ingold describes this correspondence as a way of relating that is characterized by doing things in concert, rather than a rigid back and forth interaction, as voices in a chorus harmonize or family members get along through the balance of friction. As a theoretical alternative to a “network” approach which focuses its attention on the connective structures undergirding complex social interactions, correspondence suggests a development characterized by responding to one another in an ongoing movement that allows diverse parts to move together rather than thinking of them as rigidly joined component pieces of an abstract whole.

Discussion

Correspondence and the concept of “letting the dog work” suggest a multispecies relationship characterized by participating in an activity “with” one another in concert, even if at times in confused or imperfect ways, very unlike the scene at the dog festival dance in which pets were attached to their owners and dragged along behind them. Not easily assembled or disassembled, relations between handlers and working dogs are built over time through a sustained desire to work along with their partners.

The ethnographic details presented in this chapter suggest two points. First, that humans and domestic dogs exist in particular social contexts in which their social histories are
inextricably intertwined. This has both symbolic and practical importance in that public perception affects the kind of work that dogs and their human partners are allowed to do together depending on the ways that their species, breed, and national identity are interpreted in the particular social context in which they live and by the aims of the state governing their activities. And it has biological significance in that it affects breeding practices. The obvious interplay between these social and biological elements reinforces Haraway’s (2003) concept of “naturecultures” and Weaver’s (2017) “interspecies intersectionalities” as described in Chapter 3. The second point is that working SAR dogs differ from pet dogs in significant ways and that their relationship with their human handler is also, necessarily, different from that of an ordinary pet. This relationship is characterized by an active engagement with SAR dogs as not just passive recipients of human whims, but as non-human entities with whom cooperation must be earned and reciprocated in order to work effectively. Ingold (2000) remarks that “The essence of trust is a peculiar combination of autonomy and dependency” (p. 69). Trust always involves an element of risk in that the other on whom you depend but cannot control may act contrary to expectations. The next chapter will further examine the development of mutual trust in the dog-handler relationship by working through uncertainty and navigating the species-based inequities inherent in their partnership as providers of public safety services.
Chapter 5

TRUST: “TRUST YOUR DOG”

Two of the most common phrases I heard from participants during interviews and operational settings were: “trust your dog” and “let the dog work”. What trainers and handlers meant was that one’s canine partner knows and perceives things humans cannot and, in order to be successful, a handler must understand that so they can get out of the dog’s way while ensuring that they are on task and working toward completing mission objectives such as clearing a particular area or locating people or objects. It is a delicate balancing act.

At a training exercise I attended in the United States for trailing canine teams, some of the lead handlers explained how the training scenario that day was designed to build these skills in newer dog-handler teams. The exercise involved one training “victim” and one unrelated person who traveled together along an approximately half-mile route from the starting point into a wooded area. Once they reached the tree line, they turned and walked in opposite directions and stopped approximately 150 yards away from each other. The job of the trailing teams was to receive a scent article that had been taken from the “victim” (a tissue he had handled), identify his scent near the starting point and follow it to his hiding place.

One purpose of this exercise was to allow the handlers to confirm that their dog was following the “correct” trail (the one matching the scent article they had received) rather than the trail of the other person who had traveled along the same path. To make it more difficult, the
other person happened to be a team member who often served as “victim” for the dogs during other training events and is known as a “good victim” that the dogs tend to enjoy finding and interacting with. The lead handler explained that since dogs had more practice recognizing her scent and enjoyed finding her, it might be more challenging for them to follow the other person’s trail instead.

Another difficulty was working through distractions. Matthew, a handler, explained that the amount of scent on trail becomes increasingly distracting as additional teams complete the exercise, because now there is scent from the “victim”, the unrelated person, and all the other people and dogs who walked that same path to complete the exercise. Matthew described an analogy that he found useful for imagining how that scent might be perceived by the dogs. He thinks of odor as if it were visible (since humans tend to search visually); for instance, a smoke bomb with each person’s scent profile represented by a different colored trail of smoke following behind them. If there are multiple people, there would be multiple colors of trails, which could blend in some places. So, for instance, blue smoke and yellow smoke from two different people could combine to appear green but someone could still recognize that it is made up of blue and yellow smoke. Similarly, the trailing dog will notice the scent of all the other animals who passed through the area but will (hopefully) focus only on the scent profile that matches the scent article they were presented with at the outset.

Intersections and turns can be difficult for trailing teams. Matthew explained that the smoke bomb analogy about scent trails is not perfect because, as far as we know, the scent that dogs follow is not deposited in a continuous line; it is more like a dashed line. The dog has to move from one dash to the next, and sometimes there are gaps between them in which no scent is detectable. If the person being trailed makes a turn, the dog might follow the scent in a straight
line and when they fail to arrive at any more scent “dashes” in that direction, they have to back up and search the area until they pick up the new direction. This task can become more difficult if environmental factors such as wind, terrain, or passing vehicles push the scent particles around the intersection, making it seem like it is going in multiple directions. One of the handlers explained this is the part where the handler has to be patient and let the dog work it out. They also have to be closely attuned to the dog’s behavior in order to recognize when they are in scent or not and respond appropriately to help the dog reacquire it. If the handler does not pay attention to whether the dog is in scent or becomes impatient, they might walk past a turn and cause the dog to follow along and continue searching for the scent in the wrong direction. Recall that trailing teams usually work on a leash, unlike air scent teams. Alternatively, if the dog were to follow a different scent instead of that of the missing person, they could lead the handler in the wrong direction.

In this training scenario, the victims had turned right at a point where the trail forked in three directions. We observed each of the teams as they approached and negotiated this turn. One of the lead handlers pointed out key behavioral changes: “See there? The dog’s head is up. That means he’s not in scent.” That team had gone straight through the intersection and had to come back to try and pick up the trail again once the handler realized the dog had lost the scent. “Now he is whining, that means he’s frustrated. He’s searching for the scent.” The handler had to recognize that the dog was searching for odor and decided to move them back to the last point he was sure the dog had been in scent so they could reset and keep searching. One handler explained this is helping the dog by putting them in a place where they can find the scent. “Did you notice that trail to the right is the only one where the handler walked away while the dog had his nose down? That dog was in scent, and he pulled him off of it”. This surprised me.
wondered, “Why do you think he did that?” The answer was simple: “He doesn’t realize he did it. We saw it because we know the victim is that way and we were looking for the behavior, but he doesn’t know that and so he didn’t notice the dog had picked up the scent right there”. The trainer explained the handler is thinking about a lot of things at once and some of the behavior changes of the dogs are so slight that it can be difficult to notice them if you are not already expecting it. This is another reason handlers must complete training scenarios without knowing the location of the training victim in advance.

“Get back to work!”, one handler said suddenly and gave a sharp pull on the leash while she and the dog stood next to the intersection. Her dog had been “crittering”, a term handlers use to describe when the dog is sniffing around on the ground for other interesting scents that are not the target scent. “How can she tell the difference between that and sniffing for the target odor?” I wondered. It looks different, I was informed. It did not look particularly different to me, but this handler has worked extensively with this dog and can recognize slight differences in her behavior when she gets distracted from her task. However, it is still impossible for the handler to tell if her dog is following the “victim’s” scent or someone else’s when she is actively trailing them. You don’t actually have any way to know what they are smelling, the lead handler explained. You have to be patient and let them work, and trust that they have the foundations and are following the right trail. “How do you know if you can trust the dog?” I asked. The handler shrugged: you do trainings like this and see whether they do it consistently. If they go to the right victim in this scenario, you will know they were following the right trail. Over time, with consistent training you will know whether the dog understands the game and can do it with you, or not.
After the teams had completed the exercise and successfully located the correct “victim”, the handler who ran the training revealed to the teams that neither of the victims had actually walked down that path to their hiding places. They were driven along the path on the back of a vehicle by a third person and only touched the ground once they reached the tree line to walk in separate directions. He explained it is not actually difficult for a skilled trailing dog to trail a person who was not physically touching the ground, but it may be quite difficult for a handler to trust that the dog can do it even if they know it is possible, especially if they have never worked that kind of search problem before. He explained to the handlers that he had not told them this detail ahead of time because, had they known in advance that they were trailing someone who had not ever touched the ground, they might “have made it a big deal” in their own minds – which the dogs might have noticed and reacted to - and had trouble completing the exercise as a result. But it is not a big deal to the dog, he said, and now the handlers can be confident that they and their dog are able to trail a person traveling in a vehicle.

This exercise illustrated that useful training has to be designed carefully so that dog-handler teams build their search skills along with their ability to trust each other without clearly understanding what they are doing. And this is best done in a constant state of productiveneissance. A team can only know they are on the right trail because they have practiced not knowing and, in so doing, forced themselves to attend more closely to the partially unknowable interiority of their partner. Ingold opines that human life is lived in a tension between what we have already mastered and the unknown. That there is a balance between imagination (pushing out into the unknown) and perception (seeing what is already there), and that skilled mastery, like perception, follows from imagination (Ingold 2000, 2007).
This chapter explores the affective relationship built on trust and skill between human and canine partners in a job that is fraught with uncertainty and contradictions: it is played as a game, but lives are at stake; it is largely a voluntary civic activity, but is promoted as a public service by governments seeking to increase public trust. First, mutual trust between partners is elaborated as vital to developing skill and emotional connection as a team. The next section will examine how SAR handlers, government entities, and members of the general public make sense of their responsibilities to SAR dogs as important public servants despite their somewhat inconsistent legal status as citizens and employees through practices of rescuing, healing, protecting, mourning, and honoring them as trusted partners.

Narratives of trust between handler and dog

*Being able to trust the dog is a vital mission competency*

While training in Hyogo Prefecture, Japan, Anna explained that trusting your dog to tell you when nobody is there can be difficult but is as vital a part of the mission as trusting them to tell you when someone is there. “If the dog says no, trust the dog…believe your dog; his nose is better than yours.” Sometimes there is no one to be found in an area during a real mission, and resources must be directed to areas where people are more likely to be found. Anna explained this is why mission readiness certification tests sometimes include scenarios in which there are no victims. The handler has to be able to recognize that their dog has not given any indications of detecting human odor and is “telling them” that no one is there. The handlers have to trust their dog’s judgment enough to report that they have completed their search sector and are confident that it is empty, instead of searching indefinitely, which could take time and resources away from victims located elsewhere.
Trusting the dog as a sign of handler maturity

Donna regarded the ability to trust her dog’s senses more than contradictory information provided by other human teammates as a sign of maturity in a canine handler. She described a recent incident in which her trailing dogs assisted the police department looking for a loaded gun that had been abandoned by a fleeing suspect near an elementary school, posing an obvious risk for the children who might happen upon it before it could be located. The weapon had been thrown by the suspect into some bushes at the school, but police had incorrect information about the exact location and had been unable to locate it even if with help of their dogs. Donna described the situation, “They had another dog out right before mine looking for that gun. And in defense of that dog, they were mistaken about where the suspect said that he threw the gun which was not near where my dogs found the gun. My dogs also trail, so when I sent them in, they hit a track line in the opposite direction of the suspect…And the dog started off in this other area towards the school”. Donna said she followed her dog approximately a quarter of a mile as he led her out of the search area where they believed the gun was located and ultimately found it, fully loaded, approximately 20 yards away from the fence of the elementary school on another area of the campus. She credits the successful find to her dog’s skill at searching as well as her ability to trust him more than the (incorrect) intelligence received from other sources:

I am definitely very proud of them. I’m definitely very proud that I have matured to the level where I trust my dog. You know how they say that: ‘trust your dog’. I’m glad I matured to that level and trusted my dog because it could have been really bad…There’s actually photos of kids walking by the gun with my dog alerting on it in the bush…And it was really a proud moment for me is because I felt like it kind of showed the maturity of my handling skills and my dog’s ability.
**Trusting each other to be careful**

Handlers who work in disaster settings also described trust as a necessary component of a dog-handler team’s ability to operate safely in hazardous conditions. Elizabeth, a European handler, discussed trusting her dog to be careful as a necessary precondition to sending him in harm’s way. She said that when she started doing search and rescue, she knew the risks involved and understood that her search dog would engage in activities that would place him at greater risk than those a pet dog would be exposed to. She accepted those physical and emotional risks to herself and to the dog as necessary to the mission:

*I have this mindset that my dog, he's a working dog, a rescue dog, and he doesn't have the luxury of my other two dogs...And he needs to have this ‘run your head through the wall’ mentality. So I know all of our dogs have this risk of getting injured even in practices. When it comes to search and rescue dogs, they are kind of equipment, you know, more than they are pets. Of course, they're all our pets. They're our babies. But this task comes first and a search and rescue dog and handler has to be able to prioritize this and separate this... I know what search and rescue is, and I know what I'm getting into. And when I was working with those guys that train military dogs, they tried to scare me like, ‘what will you do if you find a corpse?’ And I'm like, ‘I will find the corpse, and then I will be in therapy for the next two months. It's fine’. I knew what I'm getting into.*

Nevertheless, Elizabeth was surprised by how she felt the first time she had to send her dog alone into a disaster site with dangerous terrain in which she could not follow him. Concerned for his safety, she said she had to trust him not to get hurt in order to let him go:

*I remember when we got to our first rubble. We mostly trained in the forest because it's an easier environment for everybody. So our first mission on rubble was these piles of concrete with live wires hanging out and everything, and I was looking there and I was like, ‘Oh, my God, I'm sending my dog here. And I literally can't even help him. I just need to trust that he can be careful, that he's smart enough by now to be careful.’ So that was a bit of a shock.*
Samantha expanded on this sentiment, implying that her dog is not blithely unaware of the dangers involved in the “game” of search and rescue, but rather chooses to go along with them because he trusts her. Samantha was discussing the importance of having a strong bond with her dog and maintaining that closeness outside of training by interacting daily in the household, as opposed to the practice of kenneling working dogs while they are not training or working. She believes that her close bond with her dog is what makes him trust her enough to let her do things he regards as risky and would not otherwise be comfortable doing. For example:

*He has to trust me 100% because if I'm loading him on a helicopter and he doesn't trust me to pick him up, he's going to retreat and be gone. So he and I have to have a close working relationship and a really good bond and a lot of trust or he's not going to do the things I want him to do. And one of them is I have to pick him up and hand him off to a stranger. And he's not going to do that if he doesn't have a lot of human interaction, and he's not trusting that I'm looking out for him.***

For these handlers, trust is a vital component of the partnership because it is necessary to accomplish mission objectives but also to cope with the stress of working in dangerous circumstances. This trust is generally considered by handlers to be a two-way street, a mutual bond. But while handlers tended to describe the close bond with their dogs as a positive, highly rewarding experience, it unavoidably exists within a relationship of asymmetrical power. As Samantha and Elizabeth suggested, the trusting nature of their partnership can and sometimes does result in a dog’s work-related injury or death.

The responsibilities of handlers to prevent injury or discomfort was frequently discussed at training in the form of ensuring dogs always had access to water, were taking adequate rest, were not overheated, were not exposed unnecessarily to dangerous terrain or situations that make them uncomfortable, and so on. As noted in chapter 3, many handlers referred to this as “being your dog’s advocate”. But it was rare for handlers to speak of an injury or death of a SAR dog outside
of its applicability as a cautionary tale or learning aid for veterinary advice. I once witnessed a handler tear up at the mere thought of her dog returning to normal training after he recovered from an injury he sustained to his paw a few months previously from stepping on a piece of broken glass. It is a very emotional topic, made more complicated by the trusting bond between unequal partners.

**Rescuing Rescue Dogs**

Handlers often described search and rescue as a rewarding activity in that it combines their desire to help both people and dogs. There is a debate among handlers about whether it is better to adopt a shelter dog that needs a home and train that dog to do search and rescue so that they have a better life, as opposed to purchasing a dog from a breeder and thus having the opportunity to select one that is perhaps more likely to have suitable characteristics for the job and raise them from birth for that purpose. There are many successful dog-handler teams from both camps. The appeal for handlers from the former school of thought is that they have the opportunity to “rescue” dogs and equip them to rescue people. Thus, they are able to improve the lives of people as well as those of other animals through search and rescue training. For them, the opportunity for the dogs to grow and thrive is as important as the job of saving human lives.

Amy, a veterinarian and canine handler in the United States, is heavily involved in dog rescue and frequently fosters homeless dogs and puppies who she attempts to train and evaluate with the hopes of placing them in a suitable work situation. She spends an extraordinary amount of time doing this in addition to her full-time job and daily training for search and rescue, sometimes driving hundreds of miles to pick up and drop off foster dogs. She explained that, for her, fostering dogs is largely about meeting their emotional needs. A lot of rescue dogs (referring to dogs that have been rescued from the street or shelter, not necessarily search and rescue dogs)
have experienced some form of abuse or neglect or at least a “lack of love”, as she puts it. As a result, they may have developed fears and anxieties about certain things, and helping to figure out how to fix those issues with the dog is a big part of the fostering process. For instance, one of Amy’s foster dogs had been afraid of cars, so Amy spent every night with the dog eating dinner by throwing a piece of kibble in the back of the car, one by one, for her to retrieve until eventually she became confident going in and around cars. “I feel good about myself when I can make the dog feel good about themselves. And the dog is the most selfless creature in the world...humans don’t deserve dogs...I just love being around them and working with them”.

For Amy, working with and helping the dogs thrive and, in some cases, recover from mistreatment and broken trust perpetrated by other humans is the primary goal. It is only through this meeting of the emotional and physical needs of the dog that the opportunity to provide life-saving services to other people can emerge. In this school of thought, building the relationship between handler and dog is about creating an ideal situation in which human and canine needs are met in a way that is mutually beneficial and that does not privilege human lives over those of dogs, or at least it considers the welfare of both.

On her current SAR dog (who was a rescue), Amy remarked:

For Max to go from stray dog on the street to knowing how to search in a building or out in an open field and find somebody and knowing that I caused that, that I made the dog go from stray to this amazing dog that eventually can save someone's life - that's really incredible for me to feel like I can make a difference. But it's also critical for me to be able to see that I made a difference for him. He loves what he does. We never go to training and he's upset or doesn't want to get out of the kennel- He loves it. It's his favorite part of the week. So it brings together things I love: helping and training dogs and helping people. And it brings together what his breed was meant to do as a working breed.
Julie, a social worker, also enjoys search and rescue because it “combines my interest in helping people and love for dogs”. Julie has worked on volunteer wilderness teams and for a Federal Task Force team in the United States. She also volunteers her time as a canine evaluator for a search dog foundation which adopts dogs from shelters in order to train them to be paired with handlers from government task forces. Julie’s job involves visiting shelters and identifying dogs who have characteristics such as high play drive and hunt drive that would make them good candidates for search and rescue training. She explains, “I’m not opposed to breeders... but I like to get my dogs from shelters because I believe there are enough wonderful dogs out there that do a fantastic job at the shelters.” In fact, Julie and other “rescue” handlers pointed out that it is the very traits which make a good working dog that also tend to make homeless dogs unadoptable as pets. High energy, high drive dogs that need daily exercise and mental stimulation are more likely to be returned to a shelter for being unmanageable and causing damage to a home environment as a result of boredom and inactivity. This behavior is a result of centuries of selective breeding by humans intended to produce those very behaviors and therefore should not be treated as a defect on the part of the dogs. It is a win/win if dogs that would make poor pets can be identified and placed into jobs to which they are well suited. This view, like Amy’s, situates the responsibility on humans for their relationship with the dogs as one that has a social and biological history suggesting some degree of moral responsibility for people to figure out better ways to co-exist in the current circumstances that we helped to create (See Haraway 2003).

Further, Julie and Amy view SAR as an opportunity that, although it contains some inherent risk, also enhances the dog’s quality of life. Julie remarks,

*The dogs that we’ve gotten from shelters really, really like it. They have the genetics, and once they learn the game they get more psyched with it and more excited for it. It enhances their personality a lot – it gives them a purpose. They don’t know it does, but*
overall they just do much better. Like any dog, when you incorporate structure, discipline and love they can flourish...So they can flourish once they leave a shelter, especially if they go into a loving home.

Nevertheless, when handlers were pressed about the possibility of a dog being injured or killed on a mission, they tended to express some anxiety around verbalizing the view that the dog is simultaneously a valued, loved partner who is indispensable to the team but is also the one who will be sent into danger for the sake of sparing human team members from having to do so. Julie explains at length her thought process regarding the balancing of the lives of human and non-human animal first responders in disaster settings, suggesting that her canine partners are regarded as loved, skilled, and potentially heroic as any human teammates despite the fact that they could be sacrificed in circumstances in which that action could save human lives:

*Based on the attitude people in SAR generally have is the dog is a partner, the dog isn’t a side thought. They’re absolutely crucial to the team... Dogs have a unique and special gift that they can provide. So their value is really high and they’re treated in my opinion as family. And they’re loved. This isn’t just some dog. Everybody loves their dog and they’re family to them. And if the dog gets hurt just like if a person gets hurt, everyone jumps into action and does what needs to be done. Now if you have a person and a dog that’s hurt, the person is going to take priority over the dog. That’s one of the reasons - this is something that we were told for task force - that we have dogs. We send dogs into places on a rubble pile in a disaster site that would be very difficult for a human to get to and honestly, not to sound bad, but if you’re in a precarious situation in a real disaster site and you honestly think you’ve got life in a certain area and you have to check it out. If a dog goes in and it breaks or collapses and the dog is injured or killed because of it, what if a person had gone in there? And a person died? I’m not trying to dismiss the dog at all. But they can do it much quicker and better. And I don’t want to make it sound like they’re disposable, because they’re not, but you’d much rather risk the life of an animal than a human in a situation like that.*

*Now obviously if I know that the structure cannot hold and that its going to collapse, I’m not going send my dog in. But it’s those times where you have to make an assessment. If you think you’ve got a life in there and you’re weighing it against the possibility of your dog being injured or killed, obviously that person’s life would be of greater value than the dog.*
But that dog is family. They’re teammates and they’re not treated as second class teammates at all. If my dog – I don’t want to sound too dramatic – but if my dog died in the process of saving a human’s life, what better hero could there be? That is a true 100% hero to me. It’s no different. It’s like people who risk their safety or wellbeing for other people. That’s just mankind showing mercy and grace for humanity.

Assessing Risk

The literature on the suffering of military working dogs is relevant here. Adelman's study of US military working dogs highlights the "essential impenetrability of animal subjectivity, particularly around the issue of suffering" as a dilemma central to the figuring of war dogs (Adelman 2019, p. 213). Since canine interiority cannot be fully known, there is disagreement among humans as to whether, how and to what extent they experience trauma or suffering. And although the emotional connection between dogs who desire connection with humans and humans caring for those dogs elicits emotional and sympathetic responses, this does not necessarily prevent cruelty. Adelman argues that the military working dog and soldier collaboration is ideologically and affectively comfortable, representing two favored objects of sentiment working together and in their proper hierarchy of master and helper. But the dogs' usefulness for work is primary; their bonds of affection with their human handlers are important and touching but secondary (Adelman 2019).

I would suggest that this logic extends also to the potential suffering of search and rescue dogs. Boggs notes that the position of the state toward military working dogs is incoherent, dramatizing the disjuncture between the professed admiration toward animals and their actual treatment (Boggs 2010). They are classified as “equipment” for human use while simultaneously enjoying privileges normally reserved for human service members such as eligibility to receive certain awards and protection from mistreatment. Similar to the status of SAR dogs, the 2005 US
Army field manual lays out the protocol for dealing with injury to a military working dog or handlers:

“A human will always take precedence over an animal. If no effort is effective, the dog may be destroyed. However, all efforts should be made to avoid this; an MWD (military working dog) is an expensive and valuable asset to replace. If a situation arises where a canine is injured but the handler is not, the handler must be allowed to accompany the canine. If wounded or killed, an MWD should be evacuated using the same assets and should receive the same consideration as that given to a soldier under the same circumstances” (Department of the Army, 2005).

However, this position and the one expressed by task force SAR handlers is not, in and of itself, incoherent in a context in which first responders, human and canine alike, perform services for the benefit of the public that place themselves at risk of injury or death. Handlers such as Julie ascribed intense (presumably human) sentiments of heroism and grace to the potential sacrifice of a SAR dog on a mission equal to those that would be afforded a human casualty, whereas other handlers emphasized the development of proper skill and mindset to mitigate risk which was accepted as a given for both dogs and handlers.

John, a SAR handler with experience on civilian and military teams, noted that military operations simply assess risk differently than civilian ones do. Regarding asking his SAR dog, Bella, to engage in dangerous acts on a previous mission, John determined that “The safety measures put in place outweighed enough of the risk factor. And I was willing to accept it. We look at risk totally differently…Can it be mitigated? How do we mitigate it? Okay, good enough. Let's roll.” This is not necessarily an assessment of risk that is uniquely applied to dogs, rather it is related to the same calculus used for humans in dangerous situations. In tactical operations, some operators are expected to expose themselves to greater risks to ensure the safety of others. John explained,
A lot of it goes to training and experience. You can put those tactical officers in a more hazardous condition because they've gained the experience and they've been trained for it versus a civilian that hasn't. When you're looking at the dogs... I think mentality comes from training experience. But a lot of times your dog's capabilities are directly related to the handler's. Because, again, going back to training and experience, the people who are going to be trained are going to be training their dogs. So I think at that point, you'd look at it as a singular team versus an individual entity.

Again, in John’s assessment, trust is based in the development of skill and confidence built over time as a team. His risk calculus is not based on placing a dog in a dangerous assignment because the dog is less valuable but rather because the dog, and by extension the dog-handler team, is more skilled at a particular task.

**Media Exaggeration and Hypocrisy**

For some, the idea of “rescuing” search dogs and honoring them as “heroes” is dramatic and showy. Some handlers called out this type of language as egotistical, exaggerated, or downright absurd. As one North American SAR administrator put it, some people attempt to make a statement by operating with a “rescue” dog: “Look at me, I rescue dogs AND people”. North American handler, Jack, expanded on this sentiment, noting that “the media screws things up a lot”. Although highlighting the work of canine search teams generates public awareness and donations, which is good for search and rescue teams, Jack expressed discomfort with the tendency of such stories to exaggerate the work performed by the dogs and to depict the SAR team as lone heroes rather than members of a much larger coordinated effort.

Jack related a story of an incident for which he and his dog, Murphy, were interviewed by several media sources after locating two hikers who had been missing for several days in the woods and were presumed dead. The problem with being in the media limelight was that it “downplayed the importance of the rest of the team”. In fact, Jack freely admitted it was not
even a “*classic canine find*”. Jack explained that he and Murphy, along with one of their teammates, had been searching their assigned area when the missing people heard them talking and called out to them:

*He (Murphy) didn't go find them and come back and get me and take me to them. We heard them and I sent him towards them, and they kept talking. So he was able to find them. And then he was able to come back. And we used the path that he took to get to them a little faster, but we would have gotten there anyway. But the way the media played it was Murphy the search and rescue dog made this amazing, glorious find after people were gone for eight days on their last leg and they were about to die and all that. And they made it sound like he went out and drove himself down to the search and deployed himself and went and got them and drug them out and stuff like that.*

For Jack, that kind of media coverage did not give adequate attention to the rest of the county search and rescue team which included 30 - 40 other emergency responders and seriously downplayed the contributions of the county youth organization that organized and participated in much of the operation. In other words, it provided an unrealistic and exaggerated account of the dog’s service.

This type of concern was mentioned even more frequently by handlers I interviewed in Japan. Kimura-san complained that some SAR organizations in Japan flaunt the fact that they have a search dog on their team who was a “rescue” dog simply to get media attention and donations even though the dog does very little real work. And Kondo-san described the use of the term “hero dog” in media accounts as “somewhat absurd”, remarking that sometimes the term is misused to mark activity that is not actually heroic, echoing Jack’s concerns. That being said, Kimura-san did lament the lack of respect for older, retired service dogs, complaining that rather than “heroes” they are sometimes regarded as pitiful (“kawaisou”) or worn out (“tsukareta”).
Although animal shelters have become more common in Japan in recent years, particularly in the wake of the 3.11 disaster in which so many pets were abandoned or separated from their owners (Mattes 2018), puppy mills and pet shops still account for a large proportion of pet adoptions in Japan. And, as noted in Chapter 4, Japanese handlers were less likely to report having “rescued” their search dog, instead preferring to select one specifically bred for the purpose. Further, the idea of “rescuing” an animal, especially if one advertises that fact, was viewed by some Japanese as self-aggrandizing and even hypocritical.

In an interview with Hayashi-san, an owner of a “rescue cat cafe” (an animal shelter that allows visitors and potential adoptive owners to relax in a café-like environment and spend time with the animals for a small fee)\textsuperscript{26}, Hayashi-san explained the trouble is that taking responsibility to treat animals well is a good thing, but seeking attention or donations for it is immediately suspect. His shelter opened after the 3.11 disaster in order to try and help the pets that were left behind. Those pets are all gone now, but the work of the shelter continues because there are still other pets in need. Hayashi-san spoke excitedly about the importance of considering the stress that is experienced by animals sold in ordinary pet shops or animal cafes which are often attached to them. During our conversation he often paused to stroke one of the cats that frequently approached him, mewing and nudging his hand. He told me that there are 14 cats living in the shelter now. This is the correct number, he believes, because if there are more than that the cats become overcrowded which causes them stress and can lead to fights. These considerations about the welfare of the animals are not taken into account by pet shops, he said, because they are run for profit.

\textsuperscript{26} See Robinson 2019 for a detailed account of animal cafes in Japan
But Hayashi-san said that it is difficult to speak openly about such opinions because people think it sounds like hypocrisy (“gizen”: 偽善). People may say that they are doing charitable things for sake of the world or the environment or for everyone’s benefit, but that is not entirely true. Other people may still think that it is actually done for the person’s own benefit. For example, he continued, suppose someone volunteers to work with cats because they like cats. They may say it is for the cat’s sake (neko no tame ni) but it is really for their own (jibun no tame ni). They are doing it for themselves because they like cats and so they get something out of it: feeling good about themselves or donations. Hayashi continued, “Maybe it is for the cats too, but it’s still hypocrisy to say it is not for oneself. And so if people hear them say it’s for everyone’s benefit they will think that person is a hypocrite”. Hayashi-san explained that many questions pertaining to ethical treatment of animals are not entirely about the animals, but are sometimes presented that way to elevate a particular limited, and politically charged, perspective on the issue:

There are many perspectives. For example, pet shops are a big problem. There are many of them and it looks bad from the perspective of other countries. We should reduce the number, and my guess is within 10 or 15 years we will have reduced them by half. But it’s not that simple. It’s the right thing but there are people who work in the pet shops. So what about them? What do they do next without a job? You have to consider everyone. The whales and dolphins are the same. They are not fish, and they are cute. So people say to stop eating them because they like them and they are cute. That is for themselves. But also we have to think about the sake of the people who want to eat the meat. It’s not so simple.

Hayashi-san’s comments echo Deckha’s argument on animal cruelty laws as simultaneously welfarist and imperial. Noting the manner in which such laws are applied, Deckha observes that "human problematizations about nonhuman beings are rarely ever just about the nonhuman, but mediated by other circuits of difference", and policy interventions
ostensibly designed to curb violence against animals have also been used to reinforce civilizing missions toward domestic and colonial populations with reference to race, religion, class, or gender (Deckha 2013). Hayashi-san continues to volunteer his time to “rescue” animals because he believes it is the right thing to do but he is also self-consciously aware of an underlying tension most canine handlers did not directly state - feelings about helping cute and cuddly animals may be emotionally satisfying and even feel altruistic, but they can simultaneously be manipulated for political ends.

**Public Trust in a State of Perpetual Securitization**

The concept of a “natural disaster” has been theorized as a socially produced process which cannot ever be considered fully “natural” to the extent that it occurs outside of human influence. Rather it is co-produced in contexts that comprise a human population in conjunction with a potentially destructive agent or hazard (Oliver-Smith and Hoffman 1999). Some are more human-driven than others. For instance, the death and destruction of the 9/11 attack in the United States was the result of an intentional terrorist act, whereas the 3.11 disaster in Japan, although related to “natural” (i.e. not entirely human-influenced) weather events in the form of the earthquake and tsunami, was significantly compounded by the destructive power of the man-made nuclear power plant which was damaged and subsequently contaminated the surrounding areas. So disasters are produced and experienced socially, as are subsequent efforts at disaster preparedness and domestic security. It is these efforts for which canine search and rescue teams are often most well-known and most highly valued in terms of their operational and affective power when deployed by government entities.

Joseph Masco has described the state security apparatus focused on counterterror and the perpetual threat of an imagined, dangerous future in the United States that emerged out of the
response to the 9/11 terrorist attacks as one that is driven by the “mobilization of affect (fear, terror, anger) via imaginary processes (worry, precarity, threat)” to create a boundless horizon for military state action (Masco 2014). Adelman’s examination of military working dogs expands on this argument noting that, as political subjects who are not fully knowable, dogs’ suffering can be used to motivate public affect such as anger or compassion which are also useful affective states for maintaining citizen commitment to perpetual warfare and securitization (Adelman 2019). In effect, sympathy for animals can take the place of sympathy for humans. Adelman analyzes public responses to videos of cruelty toward (or with) dogs in combat zones as fulfilling an Orientalist legacy depicting Arab men as violent, whereas stories of soldiers "rescuing" dogs or receiving emotional support from them figures the dogs as displaying the perfect "wartime citizenship" and by proxy extends that positive affect toward military personnel in the public imagination (Adelman 2019). Although search and rescue teams, unlike military working dog or dedicated police dog units, do not engage in violent combat and do not need to be rehabilitated in terms of public image or affect, they are nevertheless subject to some similar operating procedures and are perhaps even more susceptible to being drawn into the affective, nationalist narratives supporting the perpetual securitization of daily life all the more effectively because of their “innocence”.

Case in point, in 2003 the United States Federal Emergency Management Agency (FEMA), which is responsible for, among other things, deploying canine search and rescue task forces to disaster-affected areas, was absorbed into the Department of Homeland Security and its functions were reorganized within a department whose primary focus was on counterterrorism. This reorganization had the effect of separating disaster preparedness from response and recovery efforts and dividing operations between either counterterrorism or natural hazards
rather than a more unified all-hazards approach. According to FEMA internal publications, this may have contributed to the inability of the agency to mount an adequate, coordinated response in 2005 to Hurricane Katrina, regarded as one of the deadliest disasters in US history, and for which FEMA and the federal government were heavily criticized (FEMA 2016). Leveraging the widespread popularity of canine search and rescue teams, especially ones that responded to 9/11, has been a key part of FEMA’s online strategy to rehabilitate its popular image.

Similarly to 9/11 in the United States, the 3.11 disaster served as a paradigm altering event in Japanese disaster preparedness efforts. Although disaster preparedness was hardly an unknown concept prior to the events of 2011, the importance of civil society and non-governmental entities’ involvement in the process were highlighted as access to social media and alternative sources of information revealed the depth of the inadequate response of the federal government and resulted in the Emergency Management Agency no longer enjoying a position as the sole – or most trusted- purveyor of information about the disaster, especially related to the nuclear accident and radiation exposure. Siembieda and Hayashi note the integration of non-governmental and non-profit organizations into the field headquarters of the Disaster Management Agency and Social Welfare Councils and the establishment of a volunteer coordinating office in the Cabinet Secretariat during the initial response to 3.11 as evidence of the growing acceptance by government agencies of the importance of collective efforts and operational continuity across all sectors of society as a key aspect of disaster management going forward (Siembieda and Hayashi 2015). Reliance on citizens to prepare for their own safety has expanded to include non-human “citizens” as canine search and rescue teams are increasingly supported and recognized in contracts with government agencies. As noted in Chapter 4, they are

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The Most Popular Public Employees

Search and rescue dogs’ usefulness in the public relations efforts of volunteer teams who rely on donations for funding was noted in Chapters 3 and 4. The popularity of dogs in advertising and PR campaigns has not escaped the notice of governments that benefit from the services of search and rescue canines. SAR dogs’ popularity among the general populace, especially in online formats, is routinely harnessed by government entities in their public relations efforts, regardless of whether those canine employees are actually on the payroll. In 2017, a search and rescue dog named Jagaimo was named public relations ambassador for a village in Fukushima Prefecture, Japan which was particularly hard-hit by the 3.11 disaster. After passing her certification test, Jagaimo received an ambassador’s plate for her collar from the local mayor and performed duties such as participating in search and rescue demonstrations and maintaining a presence on Facebook to interact with adoring fans (“Disaster-hit Fukushima”, Japan Times 2017). Jagaimo means “potato”, a strategic choice for the name of a public relations dog representing an area previously reliant on agriculture which was hard hit by radioactive fallout from the 3.11 nuclear accident and subsequently struggled to regain public trust in its agricultural exports (Japan Times, 2020). More than a cute face representing disaster search and rescue capabilities in a region still recovering from disaster, Jagaimo is named in such a way as to associate positive feelings with other elements of municipal leadership and products, which had suffered greatly in terms of public trust post-disaster (See Sternsdorff-Cisterna 2020).

Representing city governments or agencies with cute mascots is a well-established practice in Japan (Frühstück 2007), but the tactic of using search and rescue dogs as mascots to
build public trust in government is hardly unique to that context. The same year that Jagaimo became a public relations ambassador, a Mexican search and rescue dog named “Frida” was hailed as “the most popular public employee in Mexico” following her service locating survivors in the aftermath of the deadly 7.1 magnitude earthquake that hit the country in September 2017 (Whelan 2017). The Wall Street Journal reported that while the public approval ratings of President Enrique Peña Nieto plummeted to as low as 16% in the aftermath, citizen-led earthquake rescue efforts and the Navy’s search and rescue response enjoyed the highest public approval ratings. The article relates descriptions of Frida as representing “joy and hope” and “connection between the citizenry and the navy”. In addition, one researcher is quoted as explaining her popularity this way: “Frida’s not a politician. She’s a dog, and look, the truth is she’s cute. Just look at those glasses! She doesn’t steal money, she’s not corrupt. What else do you need?” (Whelan 2017). Positive public reactions to canine rescuers are once again specifically linked to promoting public trust in government entities and efforts under circumstances that are otherwise popularly regarded as distinctly untrustworthy.

Like Jagaimo, Frida was well-represented in online communities, becoming a household name and viral twitter hashtag (#fridarescatista) which garnerered tens of thousands of retweets. Still a social media star, Frida was honored with a memorial statue on the occasion of her retirement two years later (Garrand 2019). Just as government entities benefit from the enlistment of volunteer search and rescue canines and handlers to carry out domestic security efforts at disaster sites or criminal incidents, they additionally benefit from the viral spread of their images in virtual communities, often driven by private citizens or volunteer organizations, which generate positive sentiments toward their efforts. I will now turn our attention to search
and rescue dog memorials and their usefulness in framing or reframing public discourse about domestic security efforts in the United States and Japan.

**RIP Very Good Dogs**

A search and rescue dog named Bretagne, the last surviving search and rescue dog who deployed to the 9/11 terrorist attacks in the United States, had been something of a public figure for years prior to her death in 2016. She served on FEMA’s Texas Task Force 1 and responded to multiple other disasters, including Hurricane Katrina, in addition to serving as a reading therapy dog at a local elementary school and appearing at publicity events as a “spokesperson” for canine SAR teams. Upon her death in 2016, a memorial statue in her honor was constructed in her handler’s hometown in Cypress, Texas. The event was accompanied by formal memorial services and featured in social media posts by government officials including the governor of Texas and FEMA (Victor 2016).

In June 2016, FEMA retweeted a link to a “Today” news article about the memorial, entitled “Never forget: Last 9/11 Ground Zero search dog dies just shy of 17th birthday”. The body of the tweet included the text: “It is with heavy hearts we say goodbye to the last surviving 9/11 search dog, Bretagne. You will be missed.” This was by far the most popular tweet issued by FEMA that month, receiving 462 retweets and 488 likes (as of March 2021). Most other FEMA tweets from that month struggled to achieve likes or retweets in the double digits. And almost all of the other tweets that received more than one hundred likes also featured images of dogs. For instance, “#TakeYourDogToWorkDay is every day for our hardworking Search & Rescue teams”, featuring a photo of a canine handler and canine at a rubble site and “It’s a scorcher in several states today. Drink lots of water & make sure your pets do too. #heatwave
“#beattheheat”, which included a photo of a dog running through a body of water also received more than one hundred likes during the same month (See Fig 5.1).

![Popular tweets from FEMA’s twitter page tended to include photos of search and rescue dogs or pet dogs.](image)

Replies to the tweet about Bretagne were overwhelmingly supportive and characterized by emotional content. A breakdown of the top positive and negative sentiments contained in the body of the replies is shown in Fig 5.2\textsuperscript{27}. This figure was produced by collecting all of the responses to the Tweet and running a short code in the programming language R which identifies words in each tweet that can be described as having a positive or negative sentiment e.g. “tragedy” is a negative sentiment, “wonderful” is a positive one. The most commonly occurring terms are presented in the chart. This presentation makes it easier to identify the relative variety and content of positive or negative sentiments expressed in a long list of replies. There were, unsurprisingly, fewer negative sentiments than positive ones, resulting in a shorter list of negative sentiments.

\textsuperscript{27} Sentiment analysis was conducted in R Studio using the sentiment lexicon developed by Bing and Minqing (2004).
Table 5.1 Top negative and positive sentiments represented in replies to June 2016 FEMA tweet about the death of Bretagne, the last surviving 9/11 search and rescue dog. Analysis completed in R Studio, using lexicon developed by Bing Liu et al (2004).

Examples of replies containing positive sentiment include ones thanking Bretagne for her service and praising her positive attributes: “Thank you for your service. Rest easy.”, and “What a beautiful story. RIP, gorgeous angel.” Others expressed grief at the death of Bretagne as well as the other losses of life associated with the 9/11 attacks: “I am so sorry. I am also glad that he/she got to live a long happy life after such a horrible tragedy.” The wide range of terms showing positive sentiment directed toward Bretagne in Fig 5.1 suggest the Tweet was successful at generating the desired affective responses in readers. Further, these responses were personalized and recognized Bretagne as a public servant with subjective feelings and life experiences outside of her job. Note that the respondent who apparently did not know whether

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Bretagne was male or female referred to her as “he/she” in an apparent to attempt to avoid misgendering her or using the impersonal and inhuman “it”.

One reply included a comment from a Twitter account called “GreatGovTweets”, which describes itself as a service “showcasing great examples of US government social-media messages”, which praised FEMA for the post: ‘Congratulations on writing a great gov tweet!’.

This praise came just as FEMA was actively working to rehabilitate its public image after massive criticism and accusations of mismanagement following the Hurricane Katrina response in 2005. These efforts included engaging with social media to provide a more collaborative bottom-up response (Daley 2017) and transitioning to a “whole community approach” which attempts to “engage the full capacity of the private and nonprofit sectors, including businesses, faith-based and disability organizations, and the general public, in conjunction with the participation of local, tribal, state, territorial, and Federal governmental partners” In an all-hazards emergency preparedness” (FEMA 2011).

Ironically, one of the criticisms to which FEMA was subject regarding the response to Hurricane Katrina had been a failure to provide adequate urban search and rescue efforts in a timely manner. Nevertheless, the agency was able to draw on positive sentiments toward the “heroic” canine SAR teams that had deployed years previously to 9/11, which marked the beginning of the new security moment based on a state of constant fear and anticipation of future threats (Masco 2014) which resulted in the agency being absorbed into the Department of Homeland Security that reoriented its focus toward counterterrorism – and away from all-hazards disaster preparedness - in the first place. Popular sentiment toward the search dogs themselves seems to override such technicalities in perpetuation of positive affect toward securitization efforts. In Japan, the popularity of search and rescue dogs has been similarly deployed to
rehabilitate historical events. The next section will examine monuments as sites for honoring working dogs, but also for promoting national agendas and considering the ethical implications of their service to human society.

**Searching for Ways to Honor the Dead**

In central Tokyo, on the grounds of the Yasukuni Shrine (a Shinto shrine dedicated to the Japanese war dead - including convicted war criminals - and site of intense political controversy regarding the framing of Japan’s imperial past) stands the Army Dog Memorial Statue which honors the military dogs who died in the Pacific War. On occasions such as the commemoration of the end of the Pacific War, visitors pay their respects and leave behind offerings of flowers, water, and even canned dog food and treats. Although detailed historical records indicate these dogs were employed by soldiers and military police officers in repressing and terrorizing colonial subjects throughout Japan’s imperial project, they are celebrated as war heroes and incorporated into conservative and revisionist narratives of the imperial past, often standing in for the human participants in such controversial narratives (Skabelund 2011; Ambrose 2012).
Fig 5.2 Army Dog memorial Statue, Tokyo Japan. Visitors to the Yasukuni shrine periodically submit prayers and offerings of dog food and treats to honor the spirits of the military dogs.

The Army Dog Memorial Statue is one of three statues memorializing military animals at the shrine. A military horse and carrier pigeon are also present, but the dog statue is the most recent addition, having only been added to the site in the 1990s. Although the inscription of the statue itself makes clear that the dogs are military dogs honored for their service to the war effort, educational materials for the public present a somewhat less militaristic tone. The visitor’s guide to the shrine, available at the reception desk of the Yushukan Museum attached to the courtyard in which the memorial statues are displayed, describes the statue simply as a German shepherd “which represents the soldiers’ beloved canine comrades.” The museum docent I spoke with described the statue further, noting the offerings (cans of dog food, treats, or water) that had been laid on the statue as part of this year’s annual ceremony commemorating the end of the
Pacific War in which people had come to pay their respects to the spirits of the dogs who were lost in the war and to thank them for their efforts. Those efforts, I was told, consisted of carrying letters or equipment as well as search and rescue. The docent further explained the reason for the monument was to express the sense of loss and sacrifice since none of the dogs were returned home at the conclusion of hostilities even if they had survived. In this way, the dogs can be made to symbolically stand in for people as either victims or heroes of the war effort, depending on one’s political ideology (Skabelund 2011).

That the Army dogs were not included in the memorial to the war dead until relatively recently, compared to the other memorial statues of humans and other animals, is instructive. The expansion of the concept of “family” to include non-human members, such as pet dogs, in recent decades has been well documented in Japan and other contexts (Hansen 2013). Ambrose notes that the installation of the Army Dog statue coincides with the time of the growth in popularity of pet memorials at shrines, which are mainly performed for an individual’s pet dog or cat. In *Bones of Contention* (2012), a study of pet memorial sites in Japan, Ambrose argues that memorials that enshrine the memory of specific animals are evidence of human recognition of the “personhood” of other animals since they are represented as individuals with “names, recognizable character traits, preferences, and life stories” (Ambrose 2012). This is a direct refutation of the traditional belief that pets have less individuality than humans and that their loss is therefore less devastating since they can be replaced by another of the same species (Lorenz 1950). The description of the military dogs as “beloved comrades” and “search and rescue dogs” likely is indicative of this shift in attitudes and reflects an attempt to rebrand the dogs in such a way that promotes positive popular affect toward the war and the human soldiers, as well as pointing to the ongoing need for continued vigilance and service. After all, even if the Japanese
Self Defense Forces do not currently engage in international combat missions, search and rescue dogs are still vital for domestic preparedness efforts in light of the constant threat of natural and man-made disaster. But the shift toward recognizing pets as “persons” suggests that a memorial for “a dog” may not resonate as well as a memorial for a specific dog (e.g. Bretagne or “Hachiko”) with a society full of people who love dogs as subjects rather than objects.

Pondering this, I sat down on a bench to type up my notes about the shrine visit and look up some reference material on my smartphone. To my annoyance, I noted that I did not have any cellular data service on the shrine grounds. I wondered if it was still disabled after the embarrassing Pokemon GO incident of 2016 which had resulted in the disabling of access to cellular data during my preliminary research visit to the site. Pokemon GO is an augmented reality game played on GPS-enabled smart phones that users carry with them to interact with game elements on their screen which are associated with real-life locations. Players compete to capture non-human creatures called “pocket monsters” which they “train” to compete in battles with other players trying to occupy virtual fortress-like structures called Pokemon gyms that are associated with real-life locations. The game was wildly popular when it was released in Japan in summer 2016. In July, the game had not been officially released in China yet and, even if it had been, players would still be limited to interacting with the game elements that are present in the space where they (actually, their smartphone) are physically located. But Chinese gamers using a VPN and GPS spoofing app were able to trick the game into registering their location elsewhere so that they could virtually play at locations in which they were not physically present. Their gym location of choice: the controversial war memorial at Yasukuni Shrine. Within days of the game’s release in Japan, the Pokemon gym at the Yasukuni shrine location was virtually
captured by a player with a Pokemon character they had nicknamed “Long Live China!” Access to the game was immediately shut down on the shrine grounds.28

It is somewhat ironic that the game in question was Pokemon, an enduringly popular Japanese game regarded as an exemplar of global “cool power”. Pokemon figured prominently in Allison’s (2006) analysis of global media flows, tracing the successes of Japanese toys in the global marketplace. Allison describes it as an example of techno-animism in which traditional interest in spirits and monsters are combined with robot tech and consumer electronics to produce games based on themes of transformation and fantasy popular among Japanese youth. The incident at the shrine was an imaginary defeat by foreign consumers in a game emblematic of a Japanese product that achieved global appeal and market domination, reportedly achieving the highest recorded revenue of any mobile game during the first month of its release (Swatman 2016). Perhaps the museum and shrine was beginning to lose its currency among the nation’s youth. Frustrated in my attempts to connect with the rest of the virtual world in the gallery of historical monuments, I resorted to old-fashioned research methods and decided to visit a local pub down the street to borrow their wi-fi and strike up an in-person conversation with some Tokyo residents about the shrine monuments.

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28 For a more detailed discussion of the symbolism of the Yasukuni shrine in East Asian geopolitics, see Dudden 2008
Days after the release of the augmented reality game, Pokemon Go, access was disabled on the grounds of Yasukuni Shrine after gamers used it to publicize pro-Chinese sentiment (photo taken in July 2016 during preliminary fieldwork).

Dogs are Better than People

In a pub near the shrine, far from being offput by answering questions about their views on a site of historical and political controversy, Sato-san and Watanabe-san were happy to oblige and quickly fell into a serious discussion of their views on the ethics of working with non-human animals. The following exchange is reproduced from my field notes in order to include insights provided by local residents. The views expressed by these participants are not intended to be taken as representative of all Japanese perspectives on the matter. Sato-san maintained that the Yasukuni shrine was nationalistic and offensive because it celebrated war criminals, whereas Watanabe-san said that it had historical significance and that respecting the war veterans was important in any event. I asked them if the horse, pigeon, and dog memorials carried any significance for them. Sato-san noted the revisionist attempts to make the memory less “heavy” than it was before, making it “easier to think about” by making the dogs sound less aggressive than they probably were. However, he and Watanabe-san both agreed that war dogs did still
perform jobs such as carrying equipment and relaying messages, and that they could take these things into terrain where humans were unable to go due to dangerous gunfire, and should be credited for that.

Regarding the use of pet dogs for search and rescue efforts, Sato-san and Watanabe-san seemed to have a fundamental disagreement. Sato-san believed that dogs should not be subordinated to human will but should be able to live their own lives. And, in fact, robots should be used to replace them in any job functions that they currently perform, such as guide dogs or SAR dogs. Because we can do that with robot technology, he argued, it is not right to force dogs to do what humans want. However, Watanabe-san maintained that humans and dogs share a long history and that dogs are actually better than people in terms of intelligence and many other abilities (“ningen yori, inu no hou ga”). To illustrate, he related a story of a period in his life when he was very depressed and spent some time in the countryside with a dog and talked to the dog frequently. He felt as though he was able to express his feelings deeply and that the dog, whether or not he understood them, received them and they developed a deep bond. He believes that humans and dogs have lived together for a very long time and therefore have the capacity for a deep connection.

Sato-san and Watanabe-san concluded that they had very different opinions about dogs, but I noted it seemed that they were very much in agreement on the question of whether dogs should be conscripted into labor against their will as if they were tools. They both immediately agreed, jokingly feigning shock at my American Christian sensibility that could conceive of

29 Drones are used in search and rescue, and a research team at Tohoku University’s Human-Robot Informatics Laboratory have developed some wearable “robot” technology to track and evaluate SAR dog activities. (https://www.rm.is.tohoku.ac.jp/search+and+rescue%28sar%29+robo-dogs/). However, many SAR dog handlers and trainers regarded this as impractical. Additionally, drones cannot perform all of the functions dogs can, especially in regards to olfactory processing (See Cablk et al. 2008).
humans as the only animals with a spirit/soul. I objected that I believed no such thing, but Sato-san continued, “It is not that humans and other animals are the same, but they should all be respected (sonkei)”. Sato-san mentioned that scientists in Japan who use laboratory rats have memorial rites to them to thank them for their service (See Ambrose 2012). And Watanabe-san reminded us that the Japanese phrase “itadakimasu”, which is commonly said before meals actually means ‘thank you for this life’, and is meant to respect and thank the process that led to the life being prepared to be consumed by the humans. At this point the bartender, Ito-san, had joined our conversation and wanted to comment. He added that even if you see a mouse in a restaurant in Japan, it is not considered disgusting in the same way that it is in America. Although you would not want to see one in a restaurant, they are not thought of as “less than”, maybe just not appropriate in that space (See Douglas 1966). I vaguely wondered if he had brought that point up in anticipation of a visit by some “out of place” patrons. The three of them opined that a term like “nakama” (which can be translated as “peer” or “partner”) would be a much more appropriate one for me to use to describe animals. Watanabe-san felt a particularly strong emotional and historical connection with dogs through shared experiences, whereas Sato-san felt that dogs’ own preferences should be respected by allowing them to decide for themselves where and how to live even if it means not being a pet or worker, but both agreed that they were not to be ruled by humans but rather should be respected as sentient beings. In regards to how this ethic applied to pet dogs who might be tasked with performing search and rescue, it was finally concluded that there must be some element of agency involved since nobody is having conversations like these about search and rescue cats. Cats, obviously, would not allow themselves to be ‘owned’ by humans in the first place.
Discussion

Public safety is accomplished through social relationships (Sternsdorff-Cisterna 2020, Douglas and Wildavsky 1983), between teammates and between state, society, and public servants, species notwithstanding. It is a situation of intense affect but also unequal power. In some ways the intensity of emotion grew out of that imbalance, producing guilt about not deserving the dogs’ loyalty and uncertainty/trust developed in the process of training together while not being able to fully understand the dog’s subjective experiences and internal states. But whereas perception is individual and incomplete, affect is shared and generative. Despite the dogs’ lives being regarded as ‘secondary’ to human life in a formal hierarchy, handlers did not describe the dogs as less valuable, instead arguing that such a belief would render the partnership unworkable since it relies upon a respect for and trust in perceptual skills and physical abilities as well as capacity for affective connection that dogs are able to generate above those expected of other human teammates.
Chapter 6

CONCLUSION: TRAINING NEVER ENDS

After a search mission, a Japanese participant opined that the main lesson to take away from such an event is that “for people and for dogs, training is never over.” Indeed, SAR teams have continued to train and operate throughout this project despite daunting challenging including the COVID-19 pandemic. During the course of writing this ethnography, I have witnessed puppies join new teams, dog-handler dyads become mission certified, and a few dogs retire as handlers and dogs continue to “get along together” (Ingold 2016) in sometimes messy ways.

This research sought to contribute to a better understanding of the changing role of domestic dogs in the lives of individual citizens in the course of their interactions with the state in the contemporary political, economic and social moment by examining contact zones between human and non-human participants in the state security apparatus. Furthermore, this project contributes to the interdisciplinary understanding of the co-constructed experience of in/security and civil service within hazard-prone societies while highlighting the “embodiments, agencies, effects, and affects of a shared sentient world” (Hansen, 2014). In particular, this dissertation contributes to understanding of human-canine relations by examining the role of the domestic canine in both the private and public sphere, highlighting affective and instrumental roles dogs play in day-to-day multispecies interactions and the myriad ways in which their entanglement in
the social worlds of their handlers has meaningful outcomes for both members of the dog-human dyad.

The transnational, multispecies arrangement that characterizes canine search and rescue efforts reveals how human and dog social identities are inextricably imbricated at the interpersonal, national, and global level. Because dogs are so frequently deployed as bearers of affective and symbolic meaning, and the social identities of handlers and dogs are co-constituted in both individual interactions and in articulation with larger global systems, volunteer SAR teams are caught up in the efforts of state security and public relations projects as well as popular conceptions of their work, which may conflict with the realities of building a working relationship with the dogs. This problem has been considered in the anthropological literature arguing for a conceptual and methodological shift in the approach to multi-species entanglements by reframing the nonhuman as more than that which is “good to think” (i.e. having primarily symbolic contributions to human social worlds) but rather “good to live with” by taking seriously everyday interactions (Kirksey and Helmreich, 2010 p. 552).

Ingold (2000) suggests that it is disengagement with ‘nature’ - the notion that the non-human “marks the outer limits of the social world” and the separation of human agency and social responsibility from our involvement with the non-human environment - which lies at the root of the current ecological crisis. He argues that those who are "with" animals in their day to day lives can offer some of the best indications of how to proceed with rewriting human-animal relations in terms of active engagement. Ingold was speaking of hunters and pastoralists who depend on livestock animals for sustenance, but I suggest that search and rescue dog handlers can also provide insights that promote active engagement with non-human animals in imperfect circumstances.
As professionals working on the front lines of multispecies cooperation in the face of ecological crises, SAR teams’ experiences and insights have important implications for public policy and personal practice as it pertains to more-than-human engagement with the rest of our shared planet. In this dissertation, I have dealt with four strategies that search and rescue dogs and handlers employ to get along together in - sometimes quite literally - disastrous circumstances: partnership, advocacy, correspondence, and trust. The chapter sub-titles – ‘Read your dog’, ‘Advocate for your dog’, ‘Let your dog work’, and ‘Trust your dog’ - describe instructions given to handlers for the development of multispecies teamwork. The dogs, having not been given the same instructions verbally, have demonstrated that they are nonetheless more than able to respond, even if not always in kind.

SAR handlers not only work with non-human others to respond to the consequences of ecological disasters (which also affect non-humans), but in so doing are forced to recognize and engage with them as independent thinkers who bring a necessarily diverse array of skills and abilities to the endeavor. It is through these efforts that SAR handlers in this study came to recognize dogs as partners rather than objects or infantilized human surrogates and developed affective bonds that in some cases transcended organizational policy to the contrary. Similarly, female handlers and canines experienced parallel discrimination and found ways to advocate for one another’s fuller inclusion in public life. SAR handlers in Japan who rely on the unique skills of their canine partners unsurprisingly rejected popular pet-keeping practices that denied domestic dogs autonomy and the opportunity to live and engage with their owners on their own terms as non-human (not surrogate human) companions. Meanwhile handlers in the United States have begun to confront some of the deeply racist history in American law enforcement traditions that have been mapped on the bodies of both human and canine citizens. These efforts
suggest paths forward for producing more ethical interactions with human and non-human
partners in the provision of public safety services in both the United States and Japan that have
recently experienced crises of public trust.

Following Haraway’s slogan to “make kin, not babies” (Haraway 2016), I argue against
the view that dogs are not “persons” given that recognition of their subjectivity is integral to the
work of partnering with them for the cooperative tasks described in this ethnography, while
avoiding the anthropocentric assumption that they must be conceived of as “surrogate” humans
pressed into specific familial roles (i.e. child). Rather, the relationship is experienced as a
partnership that is not merely enhanced by, but reliant on the coordination of divergent abilities
and efforts which are honed through practices of mutual trust-building.

The common refrain that “we don’t deserve dogs” appeared in interviews as well as in
popular online discourse about the service of SAR dogs. This sentiment seemed to be connected
to a sense that dogs treat people better than people treat dogs. To be fair, there is some debate as
to whether dogs’ actions toward their humans are truly selfless acts of loyalty and devotion.
Exaggerated stories of heroic service by working dogs are not unheard of (Skabelund 2011) and
some have argued that the cooperative behaviors of dogs are merely the result of associative
training (Miklosi 2007). But whether “selfless” and “heroic” acts are intentional may be beside
the point - dogs serve as indispensable members of search and rescue teams providing utilitarian
and affective benefit for humans at their own risk, regardless of whether their intentions are
purely noble ones, the same as their human partners do. Similarly, they share in many of the
frustrations of public service, including being occasionally treated like equipment, experiencing
discrimination based on sex or national origin, becoming entangled in bureaucratic red tape, and
even being trotted out for the public like a hero while silently suffering from PTSD. These
experiences have been met with the efforts of handlers represented in this dissertation to engage with the dogs in ways that respect and value them even if not as equally situated partners, acknowledging that even though they are not always trying to do the same thing, they are doing it together.

Limitations and Implications for Future Research

This dissertation was conducted within specific constraints which produced some fortuitous as well as some limiting factors. Some of the factors which may have influenced the outcomes of this study include the field sites I had access to, unexpected constraints imposed by the COVID-19 pandemic, and the use of ethnographic methods for conducting multispecies research.

Multi-sited Fieldwork

This study examined the experiences of canine search and rescue teams in Japan, North America, and Europe. This multi-sited approach afforded several advantages over a study in a single field site including the opportunity to observe operations and organizational cultures that focused on different areas of expertise within search and rescue. For instance, the Japanese team devoted much of its attention developing increased capabilities to respond to disasters given the emphasis on disaster preparedness in the post-3.11 volunteer organizational culture. Meanwhile, the U.S. based teams I worked with tended to emphasize wilderness search and rescue and/or operations with law enforcement agencies as determined by their geographic locations (e.g. heavily wooded or densely populated areas) and the professional background of participants. The European organization focused on international cooperation, deployment, and training with civilian and military personnel expecting to respond to large-scale disasters requiring international assistance. Exposure to each of these sites allowed me to gain a more complete
understanding of the work of search and rescue teams beyond what could be gleaned from a single site and to attend to the local and global contexts affecting participants who are not bound to a single location. This revealed interesting comparisons and discoveries such as the prevalence and treatment of female SAR handlers in diverse settings and the effects of local pet-keeping practices and government ordinances on the ability of SAR teams to effectively train. Most importantly, this approach allowed me to observe broader trends in the way that humans and domestic canines cooperate to perform search and rescue functions in some substantially similar ways across cultural contexts.

However, this multi-sited approach should not be taken as an attempt to represent the experiences of all search and rescue teams, worldwide. Although multi-sited, this study only contains data relevant to the experiences of the individual members of the teams with which I interacted and should not be generalized to apply to SAR teams in all settings. Additionally, my decision to place primary emphasis on the dog-human relationship in SAR teams more broadly as a transnational endeavor may have resulted in a trade-off in terms of detailed contextualization of local socio-cultural and historical detail. Furthermore, research at each site was conducted under different circumstances, at different times, and in different languages, which makes direct comparison problematic. This was exacerbated by the COVID-19 outbreak which occurred during the course of my fieldwork, disrupting my original research plans.

**COVID-19**

Although it was my intention to study multispecies sociality in the context of global ecological precarity, the COVID-19 pandemic resulting from global transmission of a zoonotic disease was an extremely adverse event affecting not just the conduct of this research project but numerous participants and their families and loved ones. The minor inconvenience of disrupted
research plans pales in comparison to the grief, devastation, and death experienced by untold millions of people worldwide who were affected by the disease. With this in mind, it should be noted that the resulting lock-downs and travel restrictions affected my ability to conduct this research project in as thorough and rigorous a manner as would have been ideal. As discussed in the methodology section of Chapter One, portions of participant observation were curtailed, sampling and recruitment approaches were modified to rely more heavily on convenience and snowball sampling, and some interviews had to be canceled or conducted by phone, email, or virtual meeting space. I attempted to supplement my data collection efforts during this time by devoting additional study to online SAR-related training and certifications and practicing training techniques with my research assistant and quarantine companion, Snow. As I write this conclusion, I am also fostering a SAR dog and working with her daily on behavioral and skill-based training.

Incidentally, just as SAR dogs have continued to train and respond to disasters and missing person incidents throughout the pandemic, emerging research suggests that domestic dogs may be playing a role in supporting the mental health and well-being of their human companions during isolation (Bussolari et al. 2021) and that detection dogs can be trained to detect COVID-positivity in human patients (Essler et al. 2021). Studies such as these suggest emerging possibilities for future research on human-animal sociality in the aftermath of the pandemic as the contributions of non-humans to daily social life may have shifted.

**Lack of expertise in animal science/training**

Finally, as a cultural anthropologist, my training in ethnographic fieldwork methods focused primarily on human-human interactions. In practice, this meant that my primary research methods were originally designed for use with human participants, such as interviews,
participant observation, and media analysis. Although I adapted these to include observations of and interactions with canine participants, data collection still privileged interactions with humans. Furthermore, as is customary in ethnographic fieldwork, I relied upon key informants and experts to teach me about the world of canine search and rescue as it exists in the various sites at which this research took place. Although I engaged in participant observation, joining a search and rescue team for more than a year in both Japan and the United States, the amount of time necessary to gain a basic level of competence in this field, much less become certified to engage in missions with a canine partner, is substantially longer than the amount of time available for this project. Thus, my observations are necessarily those of a novice, at best. Continued participation and follow-up with participants may produce additional insights and research questions over time.

Additionally, future research would benefit from the combination of ethnographic methods with other scientific methods that capture additional detail about canine participants, such as collection and analysis of cortisol levels in canines and handlers. These types of measures, although not a complete substitute for observation and direct communication, can be used to come to conclusions about canine internal states (e.g. stress, comfort etc.) that are not possible to discern using typical ethnographic methods. For instance, recent studies of stress levels in canine and human partners such as Wojtas et al. (2020) suggest a link between canine and handler stress levels in SAR teams that may be influenced by the sex of the canine and handler. Further investigation of cortisol levels in combination with follow-up interview data could shed more light on questions such as these that are of interest to both social and biological scientists focused on improving SAR canine-handler effectiveness through interdisciplinary research.
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