

Domestication and domination: human terminology as a tool for controlling otherthanhuman animal bodies

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ABSTRACT

The language of domestication enables humans to wield power over otherthan-human animal lives. In some cases, being labelled “domesticated” ensures a life free of worry regarding food, water, and shelter. In others, “domestication” embodies a loss of agency, wildness, and potentially life. Companion animals such as cats find themselves at the center of debates regarding their freedom, reproductive agency, and even their status as domesticates. Others, such as captive elephants, are trapped in liminal spaces by virtue of their labels — “endangered,” “domesticated,” “tamed,” or simply “livestock.” As humans venture further into the world of bio-

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tech, these labels become increasingly opaque. With the introduction of hybrid xenobots, transgenic organisms grown of various stem cells, and machine-implanted, sentient species built to serve various functions, we are facing the potential that the word domestication will be again transformed allowing humans to further control the future of otherthanhuman bodies.

KEYWORDS: domestication; multi-species; human-animal; anthrozoology; control; language

1 Introduction

The meanings of words are malleable and fluid; dependent upon both the situation in which they are used and the people who use them (see Conley, et al. 2019; Epstein 2008; Mol 2014). For example, the word “feral” may indicate a beloved “pet”¹ lost and desperately in need of rescue, a child abandoned to be raised by wolves, or a “community cat” regularly fed and looked after by the humans with whom it shares outdoor space (Hill et al in press). The way in which this word is applied is often dictated by the emotional response humans wish to elicit in others. Words such as “enclosure,” are offered as a foil to zoo “cages,” while others such as “tame” are employed by humans seeking to evoke feelings of otherthanhuman animals having willingly given up their freedom and having chosen to affiliate with humans. “Domestic” or “domesticated,” like the proceeding, are ‘power words’ (Hill et al. in press; Szydlowski 2021) which may be brandished by humans to direct the narrative of otherthanhuman animal lives. The word “animal” itself is fraught with issues of definition, as some embrace the biological definition which places *Homo sapiens* firmly within the animal kingdom, while others take an exceptionalist stance in which otherthanhuman animals are considered any fauna species located somehow below humans (Merriam-Webster nd). The fact that standard dictionaries use “below” to indicate otherthanhuman status is pertinent to the wider discussion below. In addition, some scholars identify species based upon what they are *not*, using terms such as “non-human,” but we feel this term also implies a status somehow “lessor than” humanity. For the purposes of this paper, we have thus chosen the term otherthanhuman animal.

1 The authors are sensitive to the fraught nature of terms such as “wild,” “pet,” “feral,” “rescue,” “companion,” etc. We have attempted to place such terms in double quotation marks to represent our acknowledgement of their divisive nature. Single quotation marks indicate material directly cited from source material.

Biologically speaking, domestication is a generations-long process in which non-human species are bred for human-chosen behavioral and genetic characteristics (Price 2003). Biological domestication has occurred in relatively few species, and generally involves a very specific set of pre-adaptations shared by domesticated or domesticable species (Price 2003). Descriptions such as *domesticated livestock* or *domestic shorthaired cat* traditionally refer to those beings which have been purposely modified by humans. However, as Tim Ingold (2000) describes, domestication can also be described as the state of being under human control, casting it as a foil to wildness or ferality. Both domestic and domestication have now made their way into everyday language more as classifications of behavior or location rather than in a biological sense. As a sociological label applied to companion animals, however, the word more often describes one which life-shares with humans regardless of being biologically domesticated (Warwick, et al. 2013). This idea is applicable to all otherthanhuman animals whose lives intersect regularly with those of humans; for example, the term is often applied to so-called “domesticated pet” reptiles (Warwick et al. 2013). While reptiles, particularly snakes, have been bred for color variations or natural docility using captive breeding and artificial selection, there has been no true domestication of reptile species (Warwick 2014). Humans have instead, explains Warwick (2014, 78), become “god and gatekeeper” to reptiles, rather than truly life-sharing with them as we have with domesticated mammalian species. Warwick (2014) postulates that the lack of anthropomorphic bonds, a lack of shared body expression or language, and a lack of understood vocalizations has made domesticating reptiles impossible, yet the label of domestication persists. Perhaps humans cannot understand the *umwelt*² (von Uexküll [1934] 2010) of reptiles, being so taxonomically distant from them (Warwick 2014), and that has led to a lack of domesticability. But this inability to become completely domesticated may not be limited to non-mammalian species.

Consider that reptiles are lacking Price’s (2003) pre-adaptive traits mentioned above. They do not generally cohabit in bonded groups with a clear social hierarchy; they do not display a short flight distance from humans or exhibit a wide environmental tolerance, for example (Price 2003). Why then are some otherthanhuman animals such as cats, who also do not exhibit many pre-adaptive behaviors, widely considered domesticated? Perhaps the fact that the breeding of felines has been less tightly con-

² Umwelt, directly translated as ‘environment’, is used in anthrozoological writing to describe an organism’s unique method of perceiving their environment. For example, a flea may rely more upon biochemical messages to interpret its environment, whereas a human might rely heavily upon eyesight to perceive (von Uexküll, [1934] 2010).

trolled (Price 2003) has led to their simply being perceived as *domestic* — rather than biologically domesticated.

Porcher (2017) stresses that biological domestication and husbandry are often confused, asserting that the former is an attempt (conscious or unintentional) to change the heritable traits of an organism. However, the older etymology of domestication refers to the taming, training, and keeping of otherthanhuman animals, and predates Darwinian understanding of biological processes (Cassidy and Mullin-Saunders 2007). Husbandry is examined by Porcher (2017, 6) as ‘a work relationship with animals, anchored in a dynamic tie with social relations, and in the state of our relations with animals.’ This definition distinguishes husbandry from the broader meaning of domestic as being housetrained, tamed, or kept by humans (Décory 2019). This issue of confusing terms is acknowledged by Décory (2019, 41), who believes ‘domestic animal’ should be understood to refer to any otherthanhuman animal kept by humans, while a ‘domesticated animal’ as one that has been ‘kept, tamed and bred by humans until attaining a degree of accustomization or even a taste for life in captivity with humans.’ Thus, while scholars attempt to refine our understanding of domestication and our relations with domestic otherthanhuman animals, outside of academia various stakeholders and policy makers create context-specific definitions based on their different interests and goals (Décory 2019).

This viewpoint paper (Pugh, Jr. 2012) examines the intersections of the biological, sociological, and political definitions of domesticated or domestication. The interplay of these differing, and often contradictory, definitions can directly impact the lives of otherthanhuman animals and thus require reflexive use. As a field concerned with such reflexivity, anthrozoology offers an ideal foundation for an examination of domestication. In addition, anthrozoology is concerned with challenging dated notions of human exceptionalism and reconsidering human-otherthanhuman animal relationships in a post humanist world (Wolfe 2003). Anthrozoology seeks to position otherthanhuman animals as agents within ethnographic, multispecies, or sociological research, agents equally worthy of ethical consideration (Lien and Pálsson 2021; Kirksey and Helmreich 2010). Using a viewpoint article allows the authors to initiate and ‘present a summary and critical analysis’ of an issue of current interest to a wide variety of readers (Pugh, Jr. 2012; see also *Journal of Language and Education*). These papers are generally of a narrative style, and based on the authors experiences, workshops, etc. Here the authors have chosen very diverse examples encountered in their own multispecies research — Asian elephants (*Elephas maximus*), cats (*Felis catus*), wildlife kept as companions — as cynosures for a discussion of human control through the imposition of language on

otherthanhuman animal bodies. Biobots act as a foil to these familiar otherthanhuman beings, and in their case, human control may extend beyond “whole” organisms and into lab-grown, reconfigured, or disembodied otherthanhuman animal parts.

2 Being both wild and domestic

The word “wildlife” may denote undomesticated plants and otherthanhuman animals which live in a “natural” (or less human-controlled) environment and serve as foils for their domesticated kin (Dictionary O.E. 1989; Ingold 2000). This definition implies such otherthanhuman animals have not been modified or disrupted by humans, an anthropocentric rhetoric that separates humans from nature, a Cartesian divide between man and “brute.” This romanticizing of nature as “outside” human influence has been documented throughout history. In particular, since the rise of the UK humanist movement in the 1960’s whereby the urbanized middle classes, economically unbound to rural living, increasingly attributed greater value to the idea of pristine nature (Bulbeck 1999). Yet, the paradoxical dualism between human and otherthanhuman animal erodes when our shared subjectivity and our enrollment within trans-species relations is recognized (Bradshaw and Watkins 2006; Nast 2006). Indeed, the growing field of anthrozoology is gaining momentum in the dismantling of binary categories within the social sciences which traditionally situates the human at the center of human-otherthanhuman animal interactions (Tipper 2011). The shift away from Cartesian ideology can offer benefits to both humans and otherthanhuman animals as we seek to understand our relations to and with each other (Kohn 2007). In a world where we grieve for the loss of our otherthanhuman animal friendships as if they were biological kin (Kemp, Jacobs, and Stewart 2016), to be considered domesticated might initially afford a level of protection otherwise unachievable in an unaltered wild state. For example, movement into human homes or cities may have initially offered freedom from predation or a reliable daily food source. However, this protection is commonly viewed only from the perspective of the human side of the relationship; yet, we have no way to determine whether the above otherthanhuman animal kin consider any potential benefits of domestication as worth the loss of wildness and freedom from human intervention.

It is in the liminal space between dictionary definitions of wild and domesticated that many otherthanhuman animals find themselves firmly lodged. The use of power words (Hill et al in press; Szydlowski 2021) to assign a status to these otherthanhuman animals may serve to alternately support and repress them. For example, with captive elephants used for tourism purposes, there is little doubt that the word domesticated is

often used as a tool to garner support for their continued confinement in stables which are wholly inappropriate for their species (Clubb and Mason 2002; Rizzolo and Bradshaw 2018; Roocroft and Oosterhuis 2001; Schmidt-Burbach 2017; Szydlowski 2021; Varma and Ganguly 2011; Veasey 2006). By referring to these individuals as domesticated, those who “own” them seek to skirt CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) restrictions on trade in elephants, even though these otherthanhuman animals were wild-caught or wild-sired (CITES 1973; Poole and Granli 2008). In fact, some governments directly point potential owners to those Indian cattle fairs likely to provide the easiest opportunities to purchase elephants for import, while simultaneously outlining plans to protect wild elephants within their own borders (Gov’t of Nepal 2009).

Captive elephants in scientific literature are alternately referred to as wild, tame, domestic, or enslaved—and in one case as ‘semi-wild domesticated animals’ (Bansiddhi et al. 2020; Koirala et al. 2019, 5; Lair 2002). While elephants and humans have shared lives for thousands of years (Kharel 2002; Mackenzie and Locke 2012) humans have never controlled their reproduction or modified them for human use (Ingold 2000; Locke 2014). Lainè (2018) posits that some human involvement in reproduction exists in Sri Lanka, where a unique liminal elephant variety lives. The ‘village elephant’ is a wild-caught individual who has been habituated to live and work in a semi-autonomous state amongst humans (2018, 222). These village elephants are responsible for finding their own food and serve as guides in the training of newly caught juveniles (2018). Village elephants are allowed to return to the forest for procreative activities, thus ensuring a future supply of offspring for human use (2018). Lainè (2018) feels that the long-term involvement of humans in facilitating these village-wild elephant matings signifies some management of breeding. While it does not indicate progress toward biological domestication, Lainè (2018) feels that it is nonetheless significant to note.

To date, there have been no attempts to create elephant breeds, nor have elephants been physically or behaviorally changed through human effort (Bansiddhi et al. 2019; Poole and Granli 2008). Captive individuals retain their wild behaviors as well as their wild biology, and do not qualify as domesticated under scientific definitions (Poole and Granli 2008; Rizzolo and Bradshaw 2018). However, there still remains a great deal of confusion among elephant workers in both range states and “western” (another problematic word) nations alike, as to what the term really means (Poole and Granli 2008). Rizzolo and Bradshaw (2018) believe that this is due to our having been culturally conditioned to view captive elephants as domesticated otherthanhuman animals.

The use of the word domesticated in documents pertaining to captive elephants subtly (or not so subtly) influences our perception of them.

One example of the term being used purportedly to protect elephants comes from elephant specialist Richard Lair. Lair (2002, np) admits that while he understands ‘ethically and intellectually’ that elephants are not a domesticated species, he prefers they be labelled as such to gain protections via livestock departments which are typically better funded than conservation organizations. In parts of Asia, these otherthan-human animals are labelled as “livestock” or “draught,” and thus receive the protections afforded such otherthanhuman animals (Bansiddhi et al. 2020; Government of Thailand 2014). However, placing elephants into these categories can be detrimental — giving governments a way to avoid passing legislation that would improve the welfare of captive individuals, particularly those used in tourism activities.

3 Animal or commodity?

For wildlife to be domesticated it must become commodifiable, yet the value of such trans-species encounters is more nuanced than simple subservience to the needs of man (Porcher 2017). In becoming a ‘lively commodity’ the domesticated otherthan-human animal may have lost its wildness, but they do, as Haraway (2008, 88) attests, retain their ability to co-create worlds in forms of trans-species encounter. The domestic dog for example, having had its wild wolf-ness subdued, has entered an array of human-otherthanhuman animal relations. Dogs herd sheep (Włodarczyk 2015), fight in wars and sniff out landmines (Johnen et al. 2017), race for sport (Thompson 2003, 13) and act as eyes for those who cannot see (Naderi et al. 2001). In return for their service our companions are heralded, their place in society secure. Until, of course, they are surplus to requirements. The euthanasia of shelter otherthanhuman animals and the sterilization of strays as measures to resolve the surplus of unwanted pets (Coate and Knight 2010) serves as yet another demonstration of orderly human control of otherthanhuman animal bodies. While the amount of money spent on the pet industry may imply a devotion to our pets (in 2019 the UK dog food market alone generated 1.6 billion British pounds in profits [Sabanoglu 2019]), one must read such figures with caution as the pet industry itself is an enterprise historically entangled with violence. Hereditary conditions such as syringa myalgia, hip dysplasia and dermoid sinus in domesticated dogs are just a few examples of the physical cost our creations pay to meet current aesthetic “standards.” Furthermore, billions of otherthanhuman animals are killed annually to feed companion animals (De Silva and Turchini 2008). It may be little

wonder why, then, that in David Nibert's (2013) book *Human Violence*, otherthanhuman animal domestication is described as a perversion of human ethics, a process re-named 'domesecration' in recognition of the rendering of otherthanhuman animal lives as dependable upon human domination.

If these domesticated companions (dogs, for example) have had their wildness removed, are there species which might qualify both as domestic and wildlife? For instance, otherthanhuman animals that are biologically wild but reside with humans, such as "pet" alligators or human-raised chimpanzees? Perhaps the pheasants who live under the auspices of domestication, let free to roam the constructed wild in their undomesticated biological state. Maybe the common pigeon, adapted to urban landscapes and living both with and among humans. Urban streets themselves are indicative of human domination of wildlife. Concrete jungles in place of woodlands; the domestication of wild otherthanhuman animals has shaped our own developmental history, making way for contemporary society, capitalism, and industrialized civilization. Without the domestication of cattle, sheep, and crops, we wouldn't have human settlements (Gupta 2004); again, the contemporary high-rise cityscapes figuratively and literally elevate us above the wild below. As Barua (2016, 725) so eloquently proclaims: 'Rendering nonhuman life for sale is a fundamental facet of contemporary capitalism.' Indeed, our historic narratives are one of domination, whereby the wildness is subdued, controlled, and ordered (Ingold 2000). What wildlife is free from literal human disturbance is still figuratively dominated by the very taxonomic classification we attribute to them, as "nature" is ordered and categorized according to human dictated value (Price 2003). For the domesticated otherthanhuman animal we see it in the ways in which we allow them to live amongst us, as our companions, assistants, and food (Porcher 2017). We control otherthanhuman animal bodies, dictating their behavior, physical composition, and literal place in the world, all of which is determined based on human gain.

Otherthanhuman animals whose bodies we have not yet fully domesticated can also enter domestic spaces. The trade in wild pets is a growing conservation and otherthanhuman animal welfare concern for a range of otherthanhuman animals from invertebrates to amphibians, fish, birds, reptiles, and mammals. Although such otherthanhuman animals are encouraged to life-share with humans, as Warwick, et al. (2013, 78) would describe, obtaining wild pets often involves the severing of young from biological parental care and ecological systems (Collard 2014) and the stunting of species-typical behavioural development (Crailsheim et al. 2020). The desire to own wild otherthanhuman animals as "pets" has been attributed to egomorphism (Milton 2005) and a self-asserted "affinity" with wild otherthanhuman animals (Kieswette 2009) that

may be at odds with the needs of these otherthanhuman animals. Wild otherthanhuman animals are frequently sold as “pets” online (Lavorigna 2014), where social status is also facilitated by the formation of virtual communities dedicated to the ownership of wild species. For example, “civet lovers clubs,” an increasing trend in Indonesia of pet civet ownership (Nijman et al. 2014), have proliferated in recent years on social media platforms such as Instagram, Facebook and Tiktok. Pet civets occupy a liminal space between wild and domestic. Used as photo-props, entered into competitions, and taken to social events, civets both lubricate social inclusion and offer meaningful companionship as they are protected with food, shelter, vaccinations, and microchips (Hooper in progress). As more civets are captive bred and their images shared online, it is clear to see the domestication process in progress. The civet is changing in response to this new trans-species relationship. Colour morphs of dappled browns and grey make way for white pelage, brown eyes for blue and long snouts for short round noses; signs of domestication syndrome progressing (Darwin 1868). Therefore, the civet can be ascribed the status of “domesticated wildlife.”

4 Domesticates or synanthropes? How cats subtly defied human control

Unlike domesticates such as cattle, poultry, sheep, equids, or dogs, it is not as obvious how cats (*Felis silvestris catus*) have changed from their wild ancestors, or if they truly fit the definition of a domesticated otherthanhuman animal. While cats have evolved social behaviors that arguably render them more able to live alongside humans, they do not truly meet the definition of domestication (Price 2003). Domesticated otherthanhuman animals have lost the ability to thrive without the food, care, and protection provided by humans. This does not fit what we know of cats, who until recent decades have maintained a high degree of autonomy regarding their diet, movement, and reproduction (Driscoll et al. 2009; Hu et al. 2014).

During the Neolithic period early human settlements of the Fertile Crescent created a new environment and opportunity for any wild otherthanhuman animals who were sufficiently flexible to exploit it (Faure and Kitchener 2009). The house mouse (*Mus musculus*) is one example. Rather than competing with the mice population who remained living apart from humans, the ancestors of this rodent found a unique niche and thrived by moving into human homes and silos (Driscoll et al. 2009; Krajcarz et al. 2020). It is widely believed the ancestral wildcats were first attracted by the rodents pilaging human grain stores, and subsequently encouraged because they controlled the rodent populations (Bradshaw 2013; Driscoll et al. 2009). Refuse heaps that inevitably

grew on the outskirts of human towns provided year-round pickings to resourceful felines. Thus, both the rubbish and the rodents would have encouraged wildcats to adapt to living close to humans and other otherthanhuman animals, including other cats.

Have cats undergone domestication, or is their story one of synanthropy? Synanthropy is a term used by ecologists to describe otherthanhuman animals that exploit anthropogenic habitats and landscapes. Synanthropes are wild species that range from being fully human-dependent to opportunistic and occasional synanthropes, (McKinney 2006; O'Connor 2013). Phylogeographical analysis determined the Near-Eastern wildcat (*Felis silvestris lybica*) was the ancestral species of today's domestic cat (Driscoll et al. 2007). By analyzing the diets of Neolithic Near-Eastern wildcat remains, Krajcarz et al. (2020) concluded individuals were opportunistic synanthropes that exploited both anthropogenic and natural ecosystems. Although their diet relied heavily on synanthropic prey (mice drawn to the grain silos), the ancestors of cats were not wholly dependent on food supplied by humans or agricultural landscapes (Krajcarz et al. 2020). Similar to today's cats, the ancestral species appears to have exhibited behavioral flexibility, at least in terms of sustenance acquisition.

Affiliative behaviors towards humans are also prevalent throughout small cat lineages (Cameron-Beaumont, Lowe, and Bradshaw 2002). Many wildcat species are amenable to taming and various wildcat species have been kept as pets through history (Faure and Kitchener 2009). However, wildcats are not considered domesticated. The trait that sets domestic cats apart is their sociality. Unlike their wildcat cousins, the domestic cat can live socially with humans and each other (Bradshaw 2016; Brown and Bradshaw 2013; Driscoll et al. 2009). It has even been postulated that equilibrium has not been reached, and cats are still in the process of evolving sociality (Brown and Bradshaw 2013). Cats have been described as facultatively social, meaning they can live solitary lives or socially with humans and other cats (Turner 2013). Where food is widely dispersed, such as remote areas far away from human activity, cats adopt the solitary behavior of their ancestors (Macdonald 1983). Around human communities, where food sources are more concentrated, unowned cats often form colonies with social structures (Liberg et al. 2000; Natoli 1985; Wolfe 2001). Therefore, the evolution of sociality might be better described as a synanthropic behavior that evolved to allow a sub-population of wildcats to thrive in and around human settlements.

Non-pedigreed cats retain the ability to survive and even thrive in the absence of humans (Crowley, Cecchetti, and McDonald 2020). However, cats' independence as a species may be changing as increasing control is exerted upon their reproduction – both in terms of pedigree breeding and neutering of non-pedigree otherthanhuman

animals. Most traits exhibited by the contemporary cat breeds recognised by the *Cat Fancy* governing bodies in the UK and US originated within the past century (Gregory, Crow, and Dean 2013). Selection was largely based on aesthetic rather than functional traits. Breeding programs select for “desirable” traits, which leads to homozygosity of the genes underpinning these traits, thus “fixing” them in a breed. However, extensive inbreeding also doubles up on harmful recessive mutations and fixes genes responsible for hereditary diseases and congenital disorders. A study by Lipinski et al. (2008) found 20 deleterious genetic disorders in pure breeds and warns breeders to take heed. Exaggerated “desirable” features can also cause health problems, such as breathing difficulties from too short noses and nostrils, or blocked tear ducts leading to watery eyes as a result of breeding for excessively flat faces in Persians (Gregory et al. 2013). Such cats are at an obvious disadvantage when cast out from human homes to fend for themselves. Even breeding for long-haired cats can render them less likely to thrive when humans are not on hand to care for their coats. Essentially, pedigree breeding leads to increasing dependence on humans.

5 Domesticating otherthanhuman animal parts

Ingold suggests that while the exact meaning of domestication has been under discussion for centuries, one interpretation is that of ‘intervention in nature’ (Ingold 2000, 63). He further contends that some domestic otherthanhuman animal relationships have moved from ‘trust to domination’ (Ingold 2000, 61). Robotic bio-domestication encapsulates both these propositions. Biobot creation blends biological entities with robotic elements seemingly innocently, representing the ‘merging of biological and artificial world, both physically and cognitively’ {sic} (Romano Donati, Benelli, and Stefanini 2019, 201). Insects have become the otherthanhuman animals in vogue for transformation into these biological robots (Peng et al. 2011). In these experiments, a range of insects (none of whom were asked to consent to bio-modification) including cockroaches (order *Blattaria*) (Latif and Bozkurt 2012), tobacco hawkmoths, *Manduca sexta* (Bozkurt, La, and Gilmour 2009) and dragonflies (Ackerman 2017; Draper nd) have had their flight control manipulated through external human influence via implants surgically linked directly to insects’ brains and nerve cells (Bozkurt et al. 2009). While these modifications thus far do not carry down generational lines, is it possible that these biobots are the next step in domestication? Could this be the beginning of a new form of more rapid domestication?

Insects are not the only biobots (Bozkurt et al. 2009) to have their ‘function’

(Bozkurt et al. 2009, 215) non-consensually seized. Carp have undergone craniotomies for electrode insertion, allowing humans to affect their movements (Peng et al. 2011). Rats under servitude bear surgical implants which remove their autonomy (Huai et al. 2009), making them 'steer, jump or climb' (Romano et al. 2019, 6) at human will. Implants have been inserted into or onto otherthanhuman animals including but not limited to snails, locusts, moths, beetles, honeybees, bumblebees, lobsters, goldfish, carp, reptiles, pigeons, rabbits, and rats (Romano et al. 2019). These individuals' bodies often endure speciated violence and domination when negatively labelled as feral, out of place, a nuisance, pests or out of human control (Hill et al., in press). Upon receiving these artificial inserts, their bodies are transformed to being of use and are re-labelled as cyborgs (Maharbiz and Sato 2020; Zheng et al. 2011), 'bio-hybrid organisms' (Romano et al. 2019, 201), and 'novel insect-machines' (Zheng et al. 2011, 259). However, they do not escape a newly imposed anthropogenic 'techno-violence' (Oxley Heaney in progress) while humans simultaneously ponder questions regarding their taxonomic status as altered beings. Applying multiple labels to the same otherthanhuman animal bodies simply transform the methods of violence and domination.

Biobots shift domestication processes toward body-autonomy domination, using the whole otherthanhuman animal without consent, while their sentience arguably remains intact. While new ethical concerns (Coghlan and Leins 2020) are raised for human creations such as biohybrid 'systems' (Park et al. 2016, np), such as non-sentient artificial otherthanhuman animals based upon stingray morphology and built from a gold metal skeleton and rat cells (Park et al. 2016), such concerns appear absent for biobots. Furthermore, the food-harvesting speciated-violence which is inextricably enmeshed with sentient, domestic beings' lives remains globally normalised. Currently, over 66 billion living beings (World Economic Forum 2019) are under the bondage of domestication, unwilling "partner" species harvested for bodily products (e.g., dairy) or parts (e.g., meat or fur). The sentience of these beings, no longer contested (Duncan 2006), creates unquestionable suffering for those individuals (Chandroo, Duncan, and Moccia 2004; Dawkins 1977; Taylor and Weary 2000). With 'nonhuman life for sale' (Barua 2016, 725) otherthanhuman animals have been manipulated for centuries, straddled between being property (Francione 2004) and sentient commodities (Wilkie 2017). While Singer (1975) might approve of this utilitarian use of these billions of otherthanhuman animal bodies, it is hard to overlook the fact that this 'biocapital' (Helmreich 2008) is trapped in a cycle of violence and domination – one in which they are routinely and non-consensually dismembered.

Bio-tech domestication no longer requires whole otherthanhuman animal

bodies. Recently introduced xenobots (Kriegman et al. 2020; University of Vermont {henceforth UoV} 2020, 2020a, 2020b), are new life forms described as ‘novel living machines’ (UoV 2020:np and 2020a) and ‘living robots’ (UofV 2020:np). These bio-hybrid ‘reconfigurable organisms’ (Kriegman et al. 2020, 1853), are made of frog (*Xenopus laevis*) embryo cells (Coghlan and Liens 2020) which are programmed to act under human control for a proposed range of human uses (University of Vermont 2020a). While language such as ‘reconfigurable organism’ distances humans from the non-consensual, body-part harvesting of sentient beings, perhaps robotic bio-domestication can reduce the speciesed-violence experienced by millions of domestic livestock otherthanhuman animals by manipulating biological beings to become free from sentience and thus free from suffering.

Robotic bio-domestication can affect many aspects of human lives for the better. Xenobots, for example, have been used to deliver medicines and repair biological tissue (Ball 2020). Other advantages include rectifying anthropogenic pollutive actions ranging from cleaning oceanic plastic pollutants to removing food-choice-induced fat from human arteries. Alternative-protein food creation (Handral et al. 2020), in the form of cultured meat, no longer requires the whole otherthanhuman animal body. Such meat, produced from otherthanhuman animal cells in laboratories (Broad 2020) could, theoretically, bring benefits to both humans and domestic livestock individuals. Planetary life-support systems, currently negatively affected by eliminations from, and resources required to maintain, billions of commoditized, domestic otherthanhuman animal-individuals, could be substantially improved by switching to cultured meat production (see also Dufour 2013; Handral et al., 2020; Ogbuewu, Odoemenam, Omede, Durunna, Emenalom, and Uchegbu 2012; Voegele 2018). Ethical concerns notwithstanding, perhaps the future of robotic bio-domestication and biological-technological hybrid creations present the opportunity for both human-centric and non-human-centric benefits. A ‘post-animal bioeconomy’ (Broad 2020, 919) would offer a post-sentience-suffering bioeconomy with post domestic ‘meat-free’ and ‘pain-free’ (Leroy and Praet 2017, 67), meat alternatives. Human dismantling of otherthanhuman animal bodies into bots, as the next phase of deliberate, human-initiated domestication, may be part of the domestication journey. Paradoxically, complete domination, combined with robotic technology may bring the ultimate freedom, an end to sentient-otherthanhuman animal suffering endured under domestication as we know it.

6 Conclusion

Language and the human mind are both dynamic systems that change depending upon their interactions with each other. Humans have learned to wield language in ways which evoke deliberate responses in others, be it to create a sense of acceptance around the way non-humans are being treated or employment of a label to protect a species who may suffer without it. In the case of cats, the label of domesticated other-thanhuman animal has given humans control over feline lives. Whether this control was initiated by humans or felines does not seem to matter as much as the way the term is employed as to cast “house cats” as foils to those deemed feral, stray, undesirable or wild. Ultimately, it doesn’t matter whether cats were purposely domesticated or simply took advantage of the opportunities afforded by human settlements. Humans seized the opportunity to use the label to alter feline bodies, often in ways deleterious to their health. In similar ways, humans are now using language to direct the narratives of wildlife who find themselves in shared spaces.

For example, elephants have received some measure of support, as well as much harm, from being labeled domesticated. While being categorized as livestock offers a few legal protections to the captive version of this endangered species, overall, elephants have suffered multiple indignities through the application of the word. Owners of captive wildlife claim that due to their long history with humans, these other-thanhuman animals can be ethically kept under human control. Those with concern for elephant well-being use the failure of elephants to meet the biological definition of domestication as proof that none of these otherthanhuman animals are held in service to humans.

The process of domestication is ongoing for many species, and for those other-thanhuman animals who find themselves at the center of a biotech revolution, it can be a painful one. The ethical implications of creating bio-bots have not been fully defined, and yet humans appear to be plunging headlong into altering otherthanhuman animal bodies at our leisure. Whether the labels applied to these otherthanhuman animals (i.e., “technology”) will be their demise, or will lead to the release of domesticated otherthanhuman animals from the burden of providing meat and laboratory subjects remains to be seen.

This paper sought to examine the intersections of biological, sociological, and political definitions of domestication in the hopes of inspiring both academic and non-academic consideration of the ways language is employed as a tool for control. Reflexivity is needed to balance context-specific definitions which are based upon the

interest and goals of policy makers with both the individual and population needs of otherthanhuman beings. This discussion of the ways humans employ power words to evoke reactions and control non-human lives needs to continue, perhaps including an examination of the use of “monster,” or “man-eater,” with reference to “wild” species, and “pedigreed” or “street” for previously domesticated animals. Only through continued examination of these powerful words can we begin to understand our complex relationships with other species and begin to view otherthanhuman beings as equally worthy of ethical consideration.

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